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SCI-TECH NEWS

OFFICIAL BULLETIN
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SCIENCE-TECHNOLOGY
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SPECIAL
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ASSOCIATION

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SCI-TECH NEWS

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MANUSCRIPTS

Division authors are invited to submit manuscripts for publication in SCI-TECH NEWS. Because of space limitations, articles should be limited to 1600 words and should be typed double-spaced on one side of the paper. Although every effort will be made to carry all valid articles received, space limitations may require some articles to be held for subsequent publication. Copy deadline is Feb. 1, April 15, Aug. 1 and Nov. 1 for the Spring, Summer, Fall and Winter issues.

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EDITORIAL

The Function of the Librarian

Recently, a librarian who had taken over a library system from his predecessor, was chagrined to find that many of the functions performed by the staff did not meet his definition of what constituted librarianship. These functions he readily agreed to transfer to one of the administrative offices in the organization so that he might devote more time and attention to locating information required by the scientific staff from his literature collection.

When his decision and action were mentioned during a discussion of other matters by a group of librarians, the discussion underway was immediately sidetracked in favor of evaluating the action of the librarian. The audience was sharply divided between approbation and censure.

Those in favor were keenly aware of the ever increasing demands made on a librarian and his staff. With a finite amount of time and labor available to the librarian, he must not spread his staff so thinly that they have insufficient time to provide professional assistance in the areas in which they have been trained.

The opposition felt that any reasonable request from management should not be denied. The justification for increased budget, monetary and personnel, was based on an increased work load and recognition by management of the value of services received from the organization in question.

The group lacked a Solomon whose judgment would be accepted by all members of both factions and the insistent demands for attention to other topics brought the argument to an end, if not a settlement. But the question is one which merits more attention than it has received in recent years.

What is the proper function of a librarian?

As a profession we have outgrown the 18th century concept of the custodian who protects a precious collection of books from desecration by unsanctioned use. In spite of the few vestegal remnants of this class who seek seclusion and approbation by joining our ranks, as a class we have actively sought increased use of our resources over the past fifty years.

A century ago we made the transition from concern solely with books to concern with both books and journals. In this century we have seen the rapid expansion and growth of the public library. We have become interested successively in adult education, audio-visual aids and application of machines to library procedures.

In the past 15 years we have seen the research report develop and grow into an accept-

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FROM

SCI-TECH'S CHAIRMAN

C. K. BAUER

The two years I have spent as Vice-Chairman of the Science-Technology Division have been very rewarding to me personally. They have given me the opportunity to work with many of you and to become acquainted with a number I would not otherwise have met. One of my regrets is that as large as these two groups have been, they were limited. I wish that I might have become as well acquainted with all of the members of the Division. This, unfortunately, was not possible.

With the cooperation I have received from the members, it has been possible to accomplish much that should bring pride in well doing to all of us. This period has seen the complete revision, legalization, and publication of our By-laws. They are now current for the first time in many years. This was a major contribution performed under the direction of Margaret Firth.

Our post-convention session at the 1959 Convention was considered by many to be the outstanding meeting of the 50th Anniversary celebration. It was well attended and well received. For those who were unable to participate in the meeting, the publication of our parent organization **Special Libraries,** carried the papers which were read at the meeting. A large number of people, from other Divisions as well as from **Sci-Tech,** participated in the planning, scheduling, and arrangements for the meeting and it is impossible to single out any one member who was responsible for the success of this meeting.

The ASTIA Coordination Committee under Michel Friedlander has been one of our more active groups. This group was formed because of the great interest in ASTIA's services to the members of the Division, and because so many of us were not completely satisfied with the products of these services. After much preliminary correspondence among the members of the Division, a meeting was arranged with the key personnel of ASTIA and many problems were reconciled. There is still much to be done in this area, but considerable progress has been made.

The publications of the Division have prospered during this period. **Scientific Meetings** under the editorship of Gertrude Bloom and the business management of Joan Hutchinson, has been widely recognized as one of the basic sources of information of this type and has contributed to the financial well-being of the Division. SCI-TECH NEWS under the editorship of Gordon Randall has increased in size, changed in format, and with the new policy of accepting advertising will be less costly on the Division treasury.

During the past year, I have attempted to impress on the Division membership the part the Division should play in the profession. We must recognize and accept our responsibility as the spokesman for the science and technology librarian. We have the resources, our members have the knowledge, and as a group we must employ these for the benefit of the profession.

We have accomplished much in the past year. There still remains much to do. With individual acceptance of responsibility and with continued cooperation of the kind I have received, I know that progress will be made.

The Function of the Librarian

(Starts on Page 35)

ed and increasingly important segment of our collection. And in the past five years we have become concerned with the application of electronic equipment to the problem of information retrieval.

The terminology for the type of work done in a library has been expanded from reference librarian, circulation librarian, cataloger and children's librarian to include such titles as scientific analysts, abstractors, translators, documentalists and technical information officers.

This, it seems to us, is a fitting and proper evaluation of a dynamic profession. Our unwillingness to accept additional assignments, if we are qualified to perform them, will result in a circumscribed and limited activity and we must then be willing to see the emergence of a new profession whose horizon includes all aspects of the information communication process.

* * *

Please note the change of address for the editorial, subscription and advertising office. This change occurred just prior to the copy deadline for this issue. Although the editorial offices are now separated from the place of printing and the move has caused at least the usual inconvenience and delay, every reasonable effort will be made to get this issue published and to the readers in advance of the annual SLA convention. —G.E.R.

LONG-DISTANCE, LONGHAND LIBRARY RECORDS

ROBERT A. KENNEDY, Library Systems Supervisor

Bell Telephone Laboratories, Incorporated

Murray Hill, N. J.

The librarian in common with other citizens is sometimes amused, more often astonished, by tales and experience of bureaucratic records quintuplication. Do we not, however, also share the tendency to multiply and perpetuate records, possibly with much less justification? Are we sufficiently aware of how much time and talent we spend in marking up masses of paper to control the masses of published print which it has become fashionable to deplore? And if we are, and have introduced most efficient techniques to do the job, does it need doing at all?

In the Technical Information Libraries of the Bell Telephone Laboratories we have been asking ourselves such questions in an effort to simplify, combine or abolish records, to improve procedures and give better service to over 11,000 employees. Some results of this continuing effort are to be reported elsewhere shortly. The present article is concerned with the junking of local card records for serials in favor of fast and graphic communications to a distant master record.

To serve Laboratories' personnel, library facilities are available at thirteen locations in ten states. The three largest laboratories and libraries are in the northern New Jersey — New York City area — at Murray Hill, N. J., Whippany, N. J., and lower Manhattan. A fourth unit of the Technical Information Libraries — Library Technical Processes — is located in the same building as the New York Library and is responsible for centralized processing for the whole system. The two New Jersey libraries are about 12 miles apart and each is roughly 25 miles from the New York City units.

In these particular libraries, serials recording has followed common practice for dispersed library units, i.e., while serials ordering, posting and follow-up were handled by the Technical Processes unit, local serial records have also been maintained by each library for its own collection. The visible card files at the Murray Hill, Whippany and New York libraries have served as check-in, binding and routing records and have supplemented, in issue-by-issue detail, the less specific statements of each library's holdings given in the system's union list.

In looking into it, this duplicate record-breaking appeared intolerable. Studies of the work involved in maintaining the files at the four library units revealed that the bulk of some 40,000 issues received annually were being checked in at two different locations. In many cases, card records for the same title were being kept in all four locations. The multiplication of postings and records was requiring at least the labor of one man-year. The establishment in 1961 of another major library at the new laboratory under construction at Holmdel, New Jersey, would compound the problem. Could the records redundancy be eliminated?

A companion study showed that the records were very definitely being consulted— on an average of four or five times an hour at each library, to answer questions from both patrons and staff members on the receipt of a specific issue or copy or index, a retention or disposition category, binding information, and the like. From this and other facts of library life, the necessity for fast access to up-to-date, detailed and reliable serials information for front-line use could not be denied. Local records could not be abolished without providing alternative means of quickly responding to inquiries.

We decided that some of the needed data could be simply and efficiently recorded in our union list, now that an automatic typewriter was being used for its preparation. The dramatically reduced revision cycle and the economy of production effort made possible by this type-operated, tape-producing writing machine would permit the easy addition and upkeep of coded binding and serials disposition information. As for the remaining serials facts required daily, a good communication link with master records in Library Technical Processes appeared to be the solution.

Telephone was an obvious answer — low cost, reliable, fast and familiar. Further, the new Whisperphone developed in the Laboratories would permit subdued conversation in the reading areas where the serial assistants were situated. Quick written communication appeared an interesting possibility, however, not only for the purpose in hand but for other library operations. We investigated, and selected the TelAutograph system for installation in the four library locations.

This system provides for the transmission of handwritten messages from one points to another up to a distance of 50 miles, using wire circuits, i.e., telephone lines. The system may be familiar in its business applications— in sales orders, production control, accounting, airlines reservations and many other areas. Messages, written with a pencil-like stylus electro-mechanically connected to the

circuit, are reproduced at the receiving end simultaneously as written and in the same form. Either one or two-way communication is possible between locations in the system. While as many as 40 or more stations may receive simultaneously, only one, however, can write at a time.

In our installation, transceivers capable of both receiving and sending have been provided at each of the four library units on the network. (A fifth transceiver is planned for the new Holmdel library, some 30 miles from both Murray Hill and New York City.) The reading-writing instrument occupies about the same desk-top area (14 x 22") as a standard visible record file. A slim "station box" about 18" square and a small amplifier, both mounted on the side of the desk, complete one transceiver installation.

The equipment is simple to use. To transmit a message, the operator presses the on-off button with the stylus and then writes on a metal platen, as though it were paper, watching the message being reproduced on paper in an inclined 5" x 3" aperture (the receiver section of the instrument). When the message is completed, the transmitter is turned off, again by pressing the on-off button with the stylus. This action also advances the paper. The written message may be torn off at the sending or receiving end immediately, or allowed to accumulate for subsequent use or discard. Messages of any length are easily handled. Our installation uses plain paper in continuously fed, 5" wide rolls rather than printed forms, many types of which are available.

In our system, all receiver units are simultaneously activated by any message. Selective calling to a location is done by a simple low buzzer signal although a flashing lamp can also be used. Since the instrument is very quiet, the receipt at A of a B to C message is no disadvantage and can be ignored. "All-points" information, of course, can be instantly relayed to three other libraries by a single writing at the fourth. If experience proves the need, a system of using selecter keys for communicating only with one station or with a certain group of stations can be provided.

At this date (April 1960) we have had only a few weeks' trial of the apparatus and the new procedure for which it was obtained. While it is still too early to determine closely the extent of gain over the superseded practice of local record keeping, it would appear that a substantial advance has been made in operational efficiency and economy. Total annual rental and operating costs for the four-point network amount to about 75% of a serial clerk's salary; since, however, salary is only part of the employees true cost, the expense of the machine system is in fact appreciably less than this percentage. For a modest expenditure, therefore, the services of approximately one man-year have been saved.

Are there disadvantages? The time taken to consult distant records by machine exceeds that for look-up in local records by the time involved in transcribing the inquiry and the reply. This, however, is hardly a penalty since the complete question-answer cycle is still quite brief. The time, in short, is short enough. Further, with more experience of the new infant system and with the use of some simple graphic conventions and few mnemonic codes (e.g. LI — what is the latest issue received of . . . ?) elapsed communications time will be reduced. There are also, of course, occasions when use is desired of the system and it, like the telephone, is found to be "busy." (This condition, incidentally, is known immediately, in advance of placing the call). Busy-state delays, however, do not appear to constitute a problem.

The point worth making is this: even although the interrogation-answer process by electronic longhand involves two staff members and takes slightly longer, the total expenditure of library time to provide the bit of information **only when needed** is much less than that spent in the 100% duplicate recording of the data for **all** serial issues against **possible** need. This is where time-saving is significant. Talent occupied in clerical drudgery has been freed for much improved serials service. The library user profits from the additional staff time available for his personal assistance, for better housekeeping, for more up-to-date binding schedules and a variety of other serials activities.

Other gains are accruing as well. The fact that the system relays written messages, does so instantly, and provides several or more copies at one writing, makes it an instrument of considerable potential in library system operations. Its graphic capabilities were, of course, the determining factor in the decision to install it. We are only on the threshold of exploiting them but a number of efficient and economic applications are nonetheless apparent. The "all-points" bulletin feature, for instance, provides an excellent means for fast relay of administrative information, say on a last minute change of a staff meeting date, or the addition of items to the agenda. The same feature allows the reference staffs of all connected libraries to be brought to bear at once on a priority reference question. It offers a way quickly to poll other units for a missing book, urgently required; or to advise the other libraries of intent to withdraw certain items from the collection, giving them an opportunity to request its transfer; or to inform of a union card catalog change affecting all units.

In addition to system-wide uses such as these, there is a range of applications in two-point communications. The principal opera-

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SOME FURTHER THOUGHTS ON THE MATTER OF STANDARDS

C. G. STEVENSON, Manager Technical Information

Hanford Atomic Products Operation,

General Electric Co.

In a talk "Standards for Special Libraries" which I gave last summer to the SLA Convention in Atlantic City, I touched briefly on two points that seem to me to merit amplification. I say this because I believe that if the Association's standards program is to be successful, we must define objectives and establish priorities. And before these important steps can be taken, we need to make certain that all of us participating in the program are talking about the same thing.

The first point is the need to differentiate "work standards" from the many different kinds of standards needed by the Association. We should, I believe, limit this term to the meaning which it normally has in industry, i.e. the measurement of work accomplishment and the establishment of quantitative standards or goals of work accomplishment. Standards of library resources, services, space and facilities, financial support, and the like are not, by this definition, work standards. Work standards are most often applied in a library to clerical work but there may be selected professional tasks — cataloging a book, answering a spot reference question — for which quantitative standards can be developed.

The second point is that it is not necessarily desirable for the Association to give top priority to the development of work standards as defined above; that, in fact, it can progress faster by concentrating on other types of standards. This fact was forcibly brought home to me recently when a colleague called to my attention an explanatory bulletin issued by the U. S. Department of Labor on the Fair Labor Standards Act. The Bulletin defines the term "professional" as used in the Act and goes on to say this:

> (b) It is necessary to emphasize the fact that Section 13(a)(1) exempts "any professional employee employed in a bona fide . . . professional . . . capacity . . . it does not exempt persons with professional training who are working in professional fields but perform sub-professional and routine work. For example, in the field of Library Science there are large numbers of employees who are trained librarians but who, nevertheless, do not perform professional work or receive salaries commensurate with recognized professional status . . ."

When this general impression of the profession is held by responsible people (and perhaps correctly), it seems obvious to me that our standards program must place first things first.

There are additional sound reasons why we should not get entagled in the problem of developing "work standards". Work standards are of limited usefulness; they are subject to gross misinterpretation; numerous other groups are working to develop "work standards" for clerical activities and the profession is unlikely to contribute substantially to the advancement of the art.

Consider first the matter of the usefulness of work standards. Presumably the reason why we have work standards is to measure the efficiency of an operation. A moment's thought should show, however, that work standards have severe limitations as a measure of efficiency. To begin with, work standards do not answer the most fundamental question of all — does this task need to be done. There is no virtue in efficiently performing a task that serves no useful purpose. And this is not said facetiously. For altogether too many librarians, professional training merely establishes a series of reflexes. Without examining the needs of the situation in which they find themselves, they blindly set about their traditional routines. This may result in a lot of unnecessary work.

The only way that efficiency can truly be evaluated is as a contribution tothis mission of the operation being served. The most important task for any special library, I believe, is to define and get management approval of the mission of the library, the specific role it is to play in the industrial situation which is serves. Management, who may be unaware of the usefulness of an adequate library program, cannot be expected to define this without the professional help of the librarian. On the other hand, management has a clear picture of the objectives of the organization and can then decide where the library fits in. When the mission of the library has been carefully defined, the first step towards efficient operation has been taken. This first step has nothing to do with work standards.

After agreement has been reached that a particular task contributes directly to the mission of the industrial organization being served, then the next basic question is this— does this step within this task need to be done. Work standards will not answer this question. Industry generally has found that systems and procedures studies are most useful in making this determination. (1) Every librarian should have at least an elementary

knowledge of procedures analysis techniques. With this knowledge and a modicum of common sense, most librarians can do a useful systems analysis of their operation. This will assure that the task is carried out with no unnecessary steps.

Having determined that the task itself needs to be done as part of the mission of the operation and that the step within the task is a necessary one, we are **now** ready to apply work standards with some hope of profit. But even here we must continually keep in mind the limitations of the tool we are using. Let us look at some of them.

(a) The development of work standards in the clerical field is still in the most primitive stages. While it is true that work standards are available for certain well defined and routine tasks—filing a catalog card, for example — in any but the most routine tasks, standards are not available. Furthermore, the development of work standards is a specialized business and probably beyond the competence of most librarians. We should certainly make use of any standards that are developed, but we have not the time or the skills to pioneer in this field.

(b) Another continuing problem in developing work standards has to do with the definition of what is being standardized or measured. Countless past efforts by librarians to get comparative work standards by mailing out questionnaires and the like almost invariably founder on this problem. Take a very simple task of a book circulation clerk. In one library her job may include only the charging and discharging of books. In another library it may include, in addition, preparing and mailing out overdue notices, the answering of spot reference questions, or the shelving of the returned books. Because the organization of each library is different, the make-up of each job is different. The only way that the book circulation clerk's job in one library may be fairly compared with another is to define very explicitly what specific work is being measured. If the two jobs are quite dissimilar. they may not be comparable at all, even though they have the same job title. The Department Manager, too busy to bother with the petty details, may draw some quite erroneous conclusions because the job titles are the same.

(c) The next problem is how our standards are to be expressed. Work time units are probably the simplest. But management understandably prefers to measure performance in terms of cost and much standards information is concerned with the cost of performing an operation. When a standard is stated in terms of dollars, a whole new Pandora's box of misinterpretation results. There are differences in wage scales from one part of the country to the other and between libraries in the same area. There is inflation, so that a 1954 dollar must be extrapolated to the 1959 index. There is further the important question of whether the cost figure is the direct labor charge or does it include overhead. If it includes overhead, then there is the problem of defining what each different organization specifies as overhead. For these reasons, and many others, most cost/task figures are of little value outside the specific organization that develops them.

I do not wish the preceding paragraphs to give the impression that I am opposed to "work standards". On the contrary, they can be very useful. We use work standards in the Hanford Technical Information operation and we have spent a great deal of time trying to develop useful work measurement techniques. It may be worthwhile, after more important business is out of the way, for the Association to bring together in one compilation all the known "work standards" of usefulness to libraries since this information is at present widely scattered. Such a compilation could be very helpful, if only to supply approximate figures on some of our basic routines.

My intention is simply to point out that work standards are a complex matter and the Association should not get involved in the minutia of this problem when there is a critical need for basic standards of a much broader kind — standards, it should be said in passing. which the Association is uniquely capable of formulating. After all, SLA can put only so much effort into the standards project. We must focus it on the development of standards that will take us farthest for the effort expended.

(1) An excellent discussion of this point can be found in Elftman, Robert A.
Library cost studies; industrial engineering vs. cost accounting techniques., M. A., University of Minnesota, 1953.

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AUTOMATION IN TECHNICAL REPORT DISTRIBUTION AT AEDC

by

George W. Chumbley

Technical Information Branch, ARO, Inc.*

The Arnold Engineering Development Center (AEDC) located at Tullahoma, Tennessee is one of eleven Air Force installations which make up the Air Research and Development Command, USAF. AEDC was built to test model and full-scale missiles, missile components, aircraft structures, propulsion systems, and related components in wind tunnels and engine test cells. The installation is operated by a private contractor, ARO, Inc., a subsidiary of Sverdrup & Parcel, Inc., St. Louis, Missouri. As part of the contract operation, ARO, Inc., is required to prepare technical reports on all phases of tests made at AEDC. These reports make the test results available to the manufacturer of the test article, the Air Force, and other military and civilian agencies engaged in research and development directly related to the products of AEDC.

The organization within ARO, Inc., directly responsible for the physical distribution of reports printed at AEDC is the Technical Files Section, Technical Information Branch which is monitored by the office of the Chief, Technical Information and Intelligence Office, Hq. AEDC. Because AEDC reports are the property of the Air Force, external distribution of them **must** be authorized by their monitoring office. The guide employed in determining the distribution list for a report is the **Official Master Distribution List for AEDC Technical Reports** (MDL), which contains the addresses of military agencies and civilian concerns which have the proper security clearance and need-to-know certification to receive AEDC reports.

Recently the external distribution of AEDC reports has been streamlined by using IBM Electrical Accounting Machines (EAM) to print the Air Force classified document receipts (AF Form 310) and address labels. Before, all address labels and receipts used in the report distribution activity had been typed manually. This method was satisfactory until the volume of reports increased rapidly — from 65 in 1956 to 224 in 1959. Far too much time was expanded in the typing and proofreading of copy, in moistening gummed labels to fasten to the envelopes or wrapped packages, and in attaching receipts to the particular copies of the report to be distributed. Even though Addressograph plates were used for the basic addresses listed in the MDL, there were so many variations in distribution lists that an Addressograph plate could not be prepared for each variation in the basic address. (Variations in addresses, particularly in "ATTN" lines to individuals or departments, occur on each distribution list for almost every report mailed outside AEDC.)

After a study of the basic operations and time involved in the physical distribution of reports, an inventory was made of the EAM facilities available at AEDC which might be used in performing the operations. It was determined that conversion to automation could eliminate the most time-consuming operations and a number of headaches.

AF Form 310 with marginally punched holes for use in EAM, and a supply of pressure sensitive address labels were readily available. The envelopes used in the external distribution of reports were preprinted with the AEDC return address, the franking privilege, and the security classification markings, where appropriate, to complete our supply needs. In addition, the use of a standard transmittal notice rather than a separately addressed letter to accompany each package of reports was preprinted to meet the requirements of Air Force regulations and eliminated the need for placing the addresses of recipients, either by typing or Addressograph machines, on transmittal forms.

In 1959, fifty-three classified reports were printed at AEDC with an average number of 30 copies per report being mailed outside the installation. Fifteen minutes per report was an estimate of the average time spent by one person in handling a classified report for external distribution. Most of the 15 minutes were spent in typing the receipts, labels, and in stamping the envelopes with the security markings and postal registry numbers. One hundred and seventy-one unclassified reports were distributed in 1959 with an average number of 70 copies per report being distributed externally. The time spent in making external distribution of unclassified reports was less per report because no receipts are required to transmit unclassified information and only one envelope and one address label were needed to make the distribution. However, unclassified reports are given a much wider distribution than classified reports, and for this reason the total time spent in sending out an unclassified report usually equals the time required to distribute a classified report with an average number of copies, i.e., 30. It was obvious that the one person engaged in this activity

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*ARO, Inc., is the operating contractor for the Arnold Engineering Development Center, USAF.

SECTION, CHAPTER & COMMITTEE NEWS

Compiled by

REBECCA L. TAGGART

The task of assembling this feature of SCI-TECH NEWS has been a pleasant one thanks to all the chapter representatives who were so prompt in sending the reports of chapter activities. Rather than carry chapter news of a general nature, this feature will include accounts of **Sci-Tech** groups within chapter meetings and projects of particular interest to **Sci-Tech** members. Section and committee news will be welcome for the next issue.

NOMINATING COMMITTEE

Foremost in SCI-TECH NEWS is the report of the Nominating Committee headed by Ralph H. Phelps. The following members have accepted nomination as candidates for election to office:

Vice-Chairman — Chairman Elect

Margaret R. Anderson. Librarian, The Rand Corp.; Lillian A. Hamrick, Chief, Technical Information Division, Office of Technical Services.

Treasurer (for two years)

John P. Binnington, Librarian, Brookhaven National Laboratory; Walter A. Kee, Chief, Library Branch, U. S. Atomic Energy Commission.

WASHINGTON, D. C. CHAPTER

On April 26, Richard Belknap, Business Manager of the American Chemical Society was guest speaker at a meeting of the Washington, D. C. Chapter. Publishing policies of the American Chemical Society, chiefly in relation to Chemical Abstracts, provided his topic.

ILLINOIS CHAPTER

The "List of Services and Periodicals in Special Libraries in the Chicago Area, a project of the Illinois Chapter," was published in booklet form in March.

BOSTON CHAPTER

The third meeting of the Chapter's Science Technology group was held on February 16th in the Library Projection Room at the Massachusetts Institute of Technology. The fifty-six members and guests heard progress reports on the revision of the **Union List of Serial Holdings in Fourteen Industrial Libraries**, which is well underway, and the Library Assistants' Training Series which is to be held during April and May. Since the meeting this latter committee has reported that over fifty individuals have indicated an interest in the workshop. Two spring sessions are planned with the possibility of another in the fall.

The featured speaker at the meeting was Miss Lillian Hamrick, the Chief of the Technical Information Division, Office of Technical Services in Washington. Miss Hamrick presented in brief outline the history of the dissemination of scientific information, stressing the federal government's participation and contributions. She then spoke at length on the various services available through the Office of Technical Services of the Department of Commerce, with particular emphasis on those emanating from its Technical Information Division.

NEW YORK CHAPTER

The New York SCI-TECH Group was the guest of the McGraw-Hill Publishing Company on April 26. Vice Presidents Nagel, Wight, and Venezian of McGraw-Hill spoke on the **Encyclopedia of Science Technology**, other technical books in production, the philosophy of business paper publishing, and subscription ordering problems. The Group officers for 1960-61 were installed during the brief business meeting which followed a tour of the McGraw-Hill Library lead by Mrs. Guasco and her staff.

Copies are still available of the textbook **Fundamental Russian** by Anna S. Michouroff, published by the N. Y. Sci-Tech Group. Checks for $3.70 per copy (includes $0.20 for postage) should be made payable to N. Y. Sci-Tech Group and enclosed with order addressed to:

Mr. Lee Traven
Engineering Library
Socony Mobil Oil Company
150 East 42nd Street
New York 17, New York

PHILADELPHIA CHAPTER

The **Sci-Tech** group of the Special Libraries Council of Philadelphia and Vicinity presented three varied programs during 1959-1960.

On November 12, 1959, a dinner meeting was held in conjunction with the Philadelphia Chapter of the Medical Library Association. Three speakers presented their impressions of the libraries which they had visited in Russia.

The group met on March 24, 1960 at the Philadelphia College of Pharmacy and Science, where Mrs. Elizabeth Johnson, Li-

(Continued on Page 55)

THE MAIL BAG

SCI-TECH ADVISORY COMMITTEE

FRANCES C. STRATTON, Chairman
N. Y. Science-Technology Group

Congratulations on an information-packed Spring 1960 issue of SCI-TECH NEWS. Definitely the best issue ever.

The resume of the Chicago Advisory Committee meeting held on February 13 was masterfully done. I was embarrased, however, to read that the N. Y. Sci-Tech Group has "asked the National Science Foundation for financial assistance in exploring the special library resources of the New York-New Jersey area." This the Group has not done, and my written report read in part at the meeting and submitted to the Secretary and Chairman **in toto** stated:

> "The Committee on Science-Technology Resources in New York, Anne McCann, Chairman, is preparing a proposal for approval by the S.L.A. Advisory Council to approach a foundation for funds to make a survey of existing science information facilities in the N. Y.-N. J. Metropolitan area and to make recommendations for future action in this area. Our region's great research and reference libraries, by their exceptional individual efforts, have long provided excellent service to science and industry. But these individual efforts no longer suffice. Thus the acute need for cooperative action prompted the decision to draft a proposal which is still in the preliminary stages."

This letter is in no way intended as a complaint, as I fully understand the pressure under which the column was prepared with only a day's deadline for the printer. It was remarkably well written. Considering the rather delicate nature of such a proposal, however, I did want to go on record as having noted the correction, at least to you, the Editor.

Editor's Note: Your editor made several errors in the quickly prepared minutes of the Sci-Tech Advisory Committee Meeting minutes. Although these minutes appeared under the Chairman's by-line, we would like to publicly absolve C. K. Bauer of any responsibility for these errors.

* * *

SINGLE SECTION MEMBERSHIP

Mrs. Lois Erwin Godfrey, President, Rio Grande Chapter.

May I extend my thanks to those of many other Rio Grande Chapter members for the recent obvious improvement in SCI-TECH NEWS. The informative and controversial articles are all welcome, and add considerably to the interest of our **News.**

There was one action of the Sci-Tech Advisory Council as reported by Charlie Bauer (v. 14, no. 1, page 4) upon which I feel compelled to comment. I attended the Council meeting (for Helen Redman, representing the Rio Grande Chapter) but had to leave to catch a plane before the action about Section dues in the Science-Technology Division was taken. I regret that the motion that "In the future Sci-Tech membership should be limited to one free section affiliation . . . " passed unanimously. I surely would have voted against it.

According to the report, this motion grew out of recognition that "many of the Engineering Section members had enrolled, not because they had an active interest in Engineering Section activities, but rather because they were entitled to a second section free of charge." I heartily disagree that this attitude is prevalent enough to necessitate the action recommended by this motion. Rather, I feel that many of us, employed in libraries covering chemistry, physics, math and engineering now find that two **divisions** (Sci-Tech and Documentation) are important to cover our interests and that two **sections** (Chemistry and Engineering) are barely adequate as subject areas.

Perhaps a re-definition or reappraisal of Sci-Tech Division's scope and structure is needed. Surely it is needed before one can act intelligently on the limitation of Section membership in the Sci-Tech Division.

We must remember, too, that every few dollars added to dues places some member in the position of being unable to afford membership in appropriate divisions or sections — perhaps this person will choose no membership at all.

* * *

SCIENTIFIC MEETINGS

Helen J. Waldron, Assistant Librarian, Rand Corp.

I was horrified upon reading the Chairman's report of the Midwinter Sci-Tech Division meeting to realize there were some librarians who see duplication between our **Scientific Meetings** and other publications in the same area. And particularly to compare it with the LC publication seems to me to overlook a very important point. Our library subscribes to three of these publications, the

third being State's "List of International Conferences and Meetings," so I feel I have some basis for my opinionated remarks. The very healthy advantage held by S-T's **Scientific Meetings**, over both the others, is precisely that it does NOT limit itself to international meetings. By far the major portion of queries posed by our research personnel are concerned with meetings on the regional or national level. To be sure, some go abroad to attend one or more meetings but this is almost exclusively because of a specific invitation to deliver a paper or chair a session. Consequently these men have far more information on such meetings than **any** list could offer. Only rarely are we asked about international meetings held abroad, but we do have many queries about scientific meetings in the United States. No other currently available publication issues in as much detail or with as good coverage in this area as S-T's **Scientific Meetings.** And it would be a sad day indeed for this librarian if the publication had to be suspended for any reason. I am heartily in agreement with the three Committee recommendations and would like to add my voice in support.

* * *

SERBIHOBBISTS

Rosamond Cruikshank, Technical Librarian, Portsmouth Naval Shipyard.
(Note to non-Scots, the name is pronounced Crook-shank).

My first glance at Johanna Tallman's article drew a startled "Oh good! More Hobbits!" But a closer look showed the connection with my own hobby — aptronyms. You know — like the bald investor who bought all his stocks from Haires, Ltd.?

The first items in this collection of mine were met in Hartford when I noticed "Furnace Heating" by Snow, and "The Stock Market" by Dice. To be really effective they must be actual published books, not ought-to-be combinations. Some of the titles I picked up twenty-five years ago are still among my pets — like "The Automobile From Start to Finish" by Reck, or "Italy and the Italians" by Garlick. Some of them should, unlike Victorian children, be heard and not seen. For instance, "American Education in the 20th Century" by Kandel (candle) or "Wyoming Cowboy Days" by C. A. Guernsey.

Then again sometimes you will find what seems like a deliberate sequence:

Shops and Stores, by Ketchum.
Murder is My Business, by Kane.
Marriage in the Modern Manner, by Wile and Winn.
Teaching Adults, by Kidd.
Goodbye to All That, by Graves.

It can be a dangerous hobby — you may laugh at the wrong moment — people don't like the implication that they have funny names. I haven't decided whether I myself should write a book about the construction of crutches, or on the care of dachshunds!

* * *

Bernard B. Lane, General Electric Co., Hanford Atamic Products Operation, Richland, Wash.
Dear Miss Tallman:

I wish to say that I enjoyed very much your article in the SCI-TECH NEWS. Congratulations on an informative and sparkling piece of writing. My appreciation also to Gordon Randall for making it available to all of us. I shall tell him so.

Your examples struck such a familiar chord that I am thinking of suggesting to one of our supervisors that they be added to our manual of procedures for our interlibrary loan desk. In the manual now is an example of a Polish title of five words or abbreviations which was identified only by deleting the third word.

Yours is a worthwhile professional contribution. I hope to see you in print again soon.

* * *

LIBRARY BULLETINS

K. G. Blair, Chief Librarian, Convair, San Diego 12, Calif., Mail Zone 6-157.

The last issue was so popular with my staff that it was several days getting to my desk after arriving in the Library. If you have room in the next issue, will you please insert the following request of mine.

All Engineering Libraries of SLA are invited to send sample copies of their Library Bulletins or Acquisition Lists to K. G. Blair, Chief Librarian, Convair-San Diego 12, California, Mail Zone 6-157. A panel of San Diego librarians will evaluate these publications for their "value engineering" aspects. Blair will give a paper at the June SLA Meeting on the analysis of the publications received.

* * *

SCI-TECH NEWS

Lois B. Brock, former Chairman of Science-Technology Division.

These issues of SCI-TECH NEWS get more and more wonderful. The advertising certainly swells it to a meaty size — both because of its own bulk and because with it we can afford more pages. And such pages! Nice to see the DOCUMENTATION DIGEST back again after such a short absence.

The articles are interesting and professional. As I said once before, one now has to set aside a time for reading SCI-TECH NEWS when one can get full value, rather than just scanning it when it arrives and tossing it on the file heap.

Frances E. Kaiser, Editor, Translators and Translations.

The SCI-TECH NEWS is constantly growing in usefulness and professional stature, thanks to your editorial touch. I have been wanting to comment on it for some time. The lead articles as well as the increased coverage of bibliography digest, serials, and documentation make it an indispensable tool.

* * *

EDITOR-WRITER INTERCHANGE

ED's NOTE: Occasionally the correspondence between an author and the editor contains the fire, verve and sparkle which makes for good reading. The following interchange occurred when the editor attempted to justify deleting an article from the last issue of SCI-TECH NEWS which a good friend had written. The frankness of the criticism was permitted by the strength of the friendship. The author, in his equally frank reply didn't come out second best. The excerpted correspondence follows:

Dear Mac:

You, Bennet and I all got our copy removed from this issue of S-TN. So you can see how your article would have looked in print, I'm enclosing the galley proof.

I can plead space limitations for dropping your contribution — and the other two — because this issue is going to run 32 pages. But let me accept responsibility for performing the function you say editors should perform. I could have run your article, Bennet's review, and my editorial had I been willing to drop other things. After I read them in galley proof I decided to pull these three.

Let's look at your article closely now that it is in print which, somehow, gives it a different existence from hand-written or typewritten manuscript. The theme and general concept are good and I agree with them. But I think the evolution of your theme isn't up to your ability.

While I like the opening phrase of your article, there ain't no such word as nitterynattery and neither I nor any reader can be sure of what you meant or do a good job of guessing. Wet-eared means not dry behind the ears and I'll accept this version. Subjective evaluation is a prerogative which should be relegated to accepted authorities. And even then subjective evaluation should be verified by logic, statistics, or other objective proof. When you and I are old and universally accepted by the profession, then, and not until then, will our subjective evaluation be meaningful.

What is professional literature? Is it literature which pertains to a profession or is it non-amateur writing? A man who can use "poignant symbol" should be distressed at including "lousy writing" in the same paragraph.

Paragraph 7. What don't the authors in law and medicine write about and what is it they write? Here you have me thoroughly confused. Is the physician an artist until he does research on blood cells? Then what? Does he write professional literature only when he retires? Must he not use the methods of physical science when he reports on his blood cell research because this keeps it from being literature?

Paragraph 8. You use smock-stained scientist in your article. Because I think you meant stained-smock I inverted.

Paragraph 9 & 10. I doubt that there are many who are born with the gift to write. The potential may exist in some and not all in others. In those who have it, it develops slowly and only through practice. I shudder whenever I read some of my earlier writings; I may shudder ten years from now when I read material I've written this year. But I do think my writing has improved with practice. Writers who write and don't get published give up writing. And some of them might eventually produce that which would pass for literature. Hence the need and justification for all these "other journals."

I'd like to see you re-do the article because I think it should be written and I'd like to carry it in SCI-TECH NEWS. Give it a try and I think on the next go-round I'll carry it and drop some others.

Sincerely,

Gordon

Dear Sir:

One of the features which distinguishes writers from their inarticulate fellows is their inability to accept criticism — however adept and well meant — in good part. It is principally on the basis of this characteristic that I consider myself a writer.

I will rewrite and resubmit the articles as you suggest.

I am afraid, however, that you will never approve of it, since certain clues in your letter lead me to believe that there are basic differences in our tasts in writing, that we are in fact, incommensurable, like apples and pears. I judge this principally on the basis of your inversion of "smock-stained." Anybody who would change "smock-stained" to "stained-smock" is more or less incapable of understanding what I have to say or the way I say it. I would like to take up several points both in the article and in your criticism:

1. When I wrote "weteared," it had no hyphen. You inserted one. I consider this an unwarranted interference with my style. The normal progression of phrases is from separate words to hyphenated words to single words (e.g. no body, no-body, nobody). I prefer to anticipate this development whenever it adds smoothness.

As for nitterynattery, you say, "There

ain't no such word as nitterynattery and neither I nor any reader can be sure of what you meant or do a good job of guessing." I reply that there wasn't any such word as "telephone" until someone first used it and that the meaning of "nittery-nattery" is quite clear from its form and context. Unfortunately the word is not original to me; I borrowed it. It is a variant of one or more words with a long, if not quite honorable tradition in English. If you will consult: Wright, Joseph, **English Dialect Dictionary**, London, Henry Frowde, 1900, vol. 2, page 657, under the entry "gnatter," second meaning, you should be able to puzzle out the derivation. See also "nitter" in the same work.

2. Your criticism of my opinion of subjective writing is a criticism of the theme of the article. You have an editorial right to reject the article on this basis but not to edit out a main thesis from the article. Paranthetically, I would greatly prefer it if publishing in the library business were restricted to the elder statesmen, but unfortunately too many of them are incapable. In addition I don't believe it is necessary for you and me to be old to have our opinions accepted by our colleagues. It is only necessary for us to make sense. Socrates said, "Believe me if I seem to speak the truth."

3. You are right. "Lousy writing" is lousy writing.

4. Your criticism of paragraph 7 was well taken, and is worth putting up with the rest of the letter. My wife remarked on it during her typing and I was a fool not to clarify it at that time. What I meant to say is that a physician is by definition one who treats people. When he performs research (and writes about it) he is operating not as a physician but as cytologist, physiologist, biochemist, or something else.

5. "Smock-stained." I touched on this briefly above. If you can't see how "smock-stained," is a better word than "stained-smock," you are beyond hope of literary redemption. This is one case where the possibility of ambiguity is so small as to be not only negligible but laughable. It was this kind of editing that incited Churchill to say, "This is the sort of arrant pedantry up with which I will not put."

I will re-do the article as you suggested and I am certainly glad to see you jump in with both feet and edit.

Cordially,

Mac

MISCELLANEOUS MAIL

TVA PUBLICATIONS

The Tennessee Valley Authority announces the publication of its Technical Report No. 31, **The Johnsonville Steam Plant** which covers the design, construction, initial operations, and cost of the first six units of the plant with some statistical data on four additional units. The report runs 678 pages, including 264 illustrations and 90 exhibits. The Treasurer's Office, TVA, Knoxville, Tennessee will release copies of the report for $5.00 each. The publicity release states that TVA also has a series of older reports on the major dam and reservoir projects and a series of manuals on special subjects. Information on what is available should be obtainable from the Treasure's Office, Chief Engineers Office, or you might try Bernard Foy, TVA's librarian.

* * *

Dewey Decimal Classifications for Chemistry

BENJAMIN A. CUSTER, Editor
Dewey Decimal Classification

The Dewey Decimal Classification appears in two editions: an abridged edition for the use of small libraries, and a full standard library edition for the use of general libraries of practically any size. For many years the publishers have contemplated the possibility of further expansions to bibliographic fullness of certain sections of the DDC, sections which might be issued separately and would be designed for the use of special libraries and of specialized departments of general libraries which have very detailed and extensive book collections. This could be used for classification of both physical books and entries in bibliographies. It is recognized, of course, that the Universal Decimal Classification performs this function on the same general pattern as the DDC, but with much variation in detail.

The time has now come when it is possible to survey more carefully the feasibility of preparing such expansions. Would there be enough need for them to justify and repay the very considerable expenditure involved? Or are other classificatory devices now existing, including UDC, entirely adequate?

Selecting one subject somewhat arbitrarily, because it is a field that has grown rapidly in recent years, the publishers of the DDC have asked me to explore the possible interest in a detailed expansion for 540 Chemistry and 660 Chemistry technology. I should appreciate hearing from any librarian or user of chemical literature who feels that such a project would serve a generally useful and economically justifiable purpose; also from any who feel that it ought not be undertaken. If you are favorably disposed toward the expansion, can you suggest persons who might be especially qualified to advise the Decimal Classification Office in its preparation?

Please address replies to the writer at the Library of Congress, Washington 25, D. C., not later than mid-September 1960. Your advice will be greatly welcomed.

Reflections from the Pool

JOHN BINNINGTON, Librarian

Brookhaven National Library

Now that I am in the benign state of being a former Chairman of the SLA Translation Center Committee, I find that I am both a have and a have not. Memories of the development of the Center I have; a last minute statistical report of the Center I have not.

I do have some sketchy information such as there being some 33,000 translations presently stored in the Center's file and also that over the years of the operation, 14,000 requests for translations have been filled.

We started in the fall of 1953 with approximately 600. I know the number well because I went over them all in the SLA Executive Office before sending them off to Charlie Wolfenberger. Operating without a budget, the Committee managed to get these titles listed and distributed. It was a motley publication — the stencils being prepared on various typewriters and being riddled with errors because citations were not checked. It was done, however, because the Committee was determined that the holdings of the Center should be known as soon as possible.

Two years later we had a budget and an eight page **Translation Monthly** in print. **TM** bloomed into a 56 page title list before it ceased publication and included translations available from several sources other than the Center.

Although the publication is now dead and buried, it is very much to the point to discuss it briefly. The Translation Center recommended its abolition with great reluctance. The recommendation was accepted by the Executive Board with the same feeling. One reason for our grief was the change of emphasis found in **Technical Translations**, the OTS publication scheduled to succeed **Translation Monthly**. **TM** was issued as a finding list. We wanted to get titles of translated articles to our librarians as quickly as possible. We omitted abstracts because we knew the abstract journals had covered many of the articles. We wanted to avoid a duplication of work and to use the space that would have been occupied by abstracts to list more translations. **TT**, as you may have noted, includes many abstracts and is presently using 125 pages a month to list 850 articles. **TM** announced 1200 per month in a 56 page issue. It was on this point that the OTS and the SLA Translation Committee are in disagreement. I would be glad to hear from any reader who would like to comment on this difference.

We come now to the most important question. Why the need for OTS to establish a center in addition to the well established SLA operation at John Crerar? The answer we were given was that several government agencies that produced translations in quantity were unable to release the material to a non-governmental source. The OTS center was, therefore, established in part to receive, process and make available for distribution these translations. Territorial claims are now clearly marked. OTS collects government translations and stays away from industry, while the SLA Center seeks the cooperation of industry and avoids governmental material.

To continue my reflections concerning the Center, it is surprising to count the number of heads that have gotten together (without knocking) to keep the Center operating. The first Translation Center Committee was long on plans, but short on operational experience. It was indeed fortunate that the John Crerar Library was able to find the needed office and storage space, and if a more fortunate state exists we had that in the interest and work of Bill Budington and Herman Henkle. The Committee worked frequently with them — particularly in planning for the expansion of the services. Their administrative contributions and considerable friendly advice kept the Center both on and off the ground at the proper times.

A third and most welcome head was that of the National Science Foundation usually represented by Ralph O'Dette. Looking back I would say that the NSF, SLA Collaboration was a timely coincidence. The Translation Center Committee had just begun to search for support at the time that NSF was expanding its science information program. Arrangements were concluded fairly rapidly. Shortly after we were further encouraged by receiving a grant from the National Institution of Health. This arrangement continued until the establishment of the OTS center. Equal contributions are now made by OTS and NSF.

It must be noted that Mr. O'Dette was much more than just a name to us. He was a frequent attender of committee meetings and contributed frequently to planning and budget discussions.

Two ladies who were of considerable assistance (and one still is) are Marian Lucius and Mrs. Nowak of the Center's staff. Miss Lucius, who rarely had the opportunity to visit the Center and who was unable to attend committee meetings, managed to keep herself well informed of activities as the chairman. She kept after me when I procras-

tinated, and was of tremendous assistance to the Executive Board.

Mrs. Nowak, who was one of the first members of the Center's staff, has held a responsible position from the beginning. She has been particularly helpful in holding operations together during periods of staff turn-over, vacations, and emergency periods.

All the ventures of the Center were not a success. The service that failed was the card service. As you may remember, we issued **TM** on 3 x 5 cards and sold them as a lot or in subject categories. In looking back, I suspect that we didn't canvass the market thoroughly. We anticipated more takers than there were. We went along for about six months and then discontinued the service.

Sufficient has now been written concerning past events, and it is time to send out the usual call. By now there are few special libraries that haven't made use of the Center. This we know from our records. What we don't know are the number of libraries with collections of translations that have not contributed to the Center. We don't know the number that have sent older copies from their files, but have not sent recently their prepared translations. If all goes well, we'll have the opportunity to learn this shortly.

In the meantime, the Center expects you to take the initiative and make your contribution. We realize there are all kinds of stumbling blocks. If you are having troubles, it is suggested that you write to a member of the committee. Someone from the outside can often be a persuader.

Periodicals Duplicate Exchange Program

The objective of this program, which is open to all Sci-Tech Division members, is to provide for useful and economical disposition of surplus copies of journals and serials.

This program functions on the basis of lists of surplus items which are held for 30 days while the recipients of the list have an opportunity to request wanted materials. The shipments are forwarded pre-paid on a first-come, first-served basis. There are no refunds no postage , no records, no correspondence, relating to availability or lack of availability.

The program has been in existence for three years and has enabled a number of participants to build up or complete some of their holdings at minimum cost. Over 80 members are active.

For further inquiries contact:

George E. Halpern,
Chief Librarian
The Martin Company
Mail J 398
Baltimore 3, Maryland

TECHNICAL BOOK COSTS

FRANK S. WAGNER, JR.
Technical Librarian, Celanese Chemical Co.

(Ed. note: This article was excerpted from a letter by Wagner to Sara Aull, Reference Librarian, University of Houston and from a letter to the editor of S-TN. The 1959 figure for the cost of books for the Celanese Chemical Co. is very comparable to the cost of $8.20 reported in S-TN, Winter, 1958 p. 7).

I recently prepared a tabulation of the first 500 English language scientific books we considered for purchase over the past several years, noting the date of publication, the number of pages and the cost, then calculated the average cost per page. This information may be of some interest either to you or your library order department, for it seems to show a clear trend. (In each year, the first 500 English language books which came under serious consideration for purchase by our library were considered.)

Year	Cost per page (cents)
1959	2.6684
1958	2.6678
1957	2.2137
1956	2.2091
1955	2,2006

The average cost per page of scientific books increased approximately 20% between 1957 and 1958. Unfortunately, the study did not provide data which would explain this increase.

I must point out that these are books which happened to be published in the English language — throughout the world. Thus books published in Germany, India, Australia, South Africa, and these published in the Scandinavian countries are sometimes included. When the books were issued only in paper-bound form, an average binding fee of $3.25 per volume was added to the net cost. This procedure may be unwarranted for general purposes but $3.25 per copy is what it costs us to get most books bound and thus it is a necessary expense attached to the purchase of a paper-bound volume. Finally, the list of books used was conflated in a purely arbitrary manner and is related only to the books our research people were interested in, viz. organic and physical chemistry in pertoleum, chemical products and their associated technologies. Publications having in excess of 60 pages are considered books. Any publication having cloth binding was considered a book. The mean book price in 1959 was $8.280 with extremes from $1.25 to $37.50.

It is highly probable that the accuracy of this study is less than 1 part per 500, hence the extra decimals in the cent cost per page have no meaning. The difference in the three earlier years and the two later years, though, must certainly be significant.

BIBLIOGRAPHY DIGEST

Compiled by
MILDRED BENTON

AERODYNAMICS

60. Aerndynamics studies; the forces acting on an air vehicle. A reveiw of the literature.
M. Z. Krzyoblocki. Chicago, Ill., University of Chicago, Jan. 1960. 231p. (WADC TN 56-360, Part XXIV) (Contract AF33 (616)-5689).

This is a continuing bibliography, the first having been issued in 1957. Subject coverage includes. friction drag; skin temperature and heat transfer; wave drag, form drag; kinetic theory of gases; hypersonics; control surfaces; guest problems, icing phenomena; high altitude problems, aerophysics, astrophysics, cavitation; ballistics; and propellers.

61. Bibliographical review of panel flutter and effects of aerodynamic noise.
J. V. Rattayya and L. E. Goodman. Minneapolis, Minn., Minnesota University, June 1959. 42p. (WADC Rept. 5970) Contract AF33(616)5426 (PB 151890)

A critical review, containing 215 references, covering studies from the U. S., Russia, England, France, etc. Information is presented in sections on panel flutter; structural effects of aerodynamic noise; and the measurement and theory of jet noise.

62. Ducted propellers — a critical review of the state of the art.
A. H. Sacks and J. A. Burnell. Palo Alto, Calif., Hiller Aircraft Corp., June 26, 1959. 71p. (Rept. ARD 232) (Contract Nonr 2677(00)) (AD 227316)

Includes 113 references.

63. Review of panel flutter and effects of aerodynamics noise. Part I. Panel flutter, Part II. Structural effects of aerodynamics noise.
L. E. Goodman and J. V. Rattayya. Appl. Mech. Revs. 13: 1-7; 81-87, Jan., Feb. 1960.

A total of 243 non-annotated references are listed (66 in Part I and 177 in Part II).

ATMOSPHERE

64. Air pollution bibliography, v. 2.
Arnold J. Jacobius, Jack R. Gibson and others. Washington, D. C., Air Pollution Engineering Program, Division of Sanitary Engineering, U. S. Public Health Service, Apr. 1959. 176p.

Including material published between 1952 and 1958, numbering 800 abstracts. An author and subject index which accumulates entries of both volumes I and II are given.

65. Annotated bibliography of ozone in the atmosphere 1858 - 1959.
Mary L. Rice and Geza Thuronyi. Meteorol. Abs. and Bib. 10: 759-794, May 1958; 920-957, June 1959.

Part I covering the period 1858-1953 includes 162 annotated references. Part II covering 1954-1959 includes 168 references, also annotated. An outline of subject contents precedes each part. There is also a geographical outline.

BERYLLIUM

66. Beryllium — fabrication and joining.
R. L. Scott. Oak Ridge, Tenn., U. S. Atomic Energy Commission, Jan. 1960. 12p. (TID 3542).

This search, containing 128 non-annotated references was prepared to serve as a guide to the report literature. Studies on compacts and powder metallurgy are included. There are a few journal articles, but mostly reports, listed alpha-numerically under the issuing agency.

67. Beryllium — fabrication and joining. A literature search.
R. L. Scott. Oak Ridge, Tenn., U. S. Atomic Energy Commission, Jan. 1960. 6p. (TID 3624).

This is a listing of classified reports. It is limited to governmental agencies and their contractors.

68. Current beryllium literature. A selected bibliography January 1958-August 1959.
Zanier D. Lane, Livermore, Calif., California University, Radiation Laboratory, Sept. 29, 1959. 33p. (UCRL 5705) (CONTRACT W-7403-eng-48)

Lists articles which have appeared in journals received in the Library and also those found in abstracting journals. Sources for the latter are indicated. Available from OTS.

COLD EFFECTCS

69. Absorptivity of ice. A critical review.
J. B. Lyons and R. E. Stoiber. Hanover, N. H., Dartmouth College, Oct. 31, 1959. 13p. (Sci. Rept. 3) (AD 230753).

The literature, including 22 references is critically evaluated in the light of new measurements to determine ice absorptivity.

70. Arctic bibliography, v. VIII.
Marie Tremaine, ed. Washington, D. C. Dept. of Defense, 1959. 1281p.

Continuing coverage of the Arctic this volume abstracts and indexes contents of 5,623 publications. Subject fields receiving special emphasis are: Body systems; human and other; Botany; Construction; Disease; Ecology;

Economic and social conditions; Environmental effects of darkness, light, and low temperature on man, animals, and plants; Eskimos; Expeditions, especially Russian; Fishes and fisheries; Frostbite; Geology; Hypothermia; Ice; Insects; Meteorology; Mineral resources; Oceanography; Physiology; Snow; and Transportation.

71. Effects of cold on man, an annotated bibliography, 1938-1951.
Wave Elaine Culver. Washington, D. C., The American Physiological Society, Oct. 1959. 524p. (Physiol. Rev. v. 39, Suppl. 3, Part II of October 1959 issue).

This 2,736 item bibliography was prepared in the Science and Technology Division of the Library of Congress under the auspices of the Office of Naval Research and the Office of the Surgeon General of the Army. Abstracts are presented in a subject classification, arranged alphabetically by author, and an author index is included. Copies may be obtained from the Business Office, American Physiological Society, 9650 Wisconsin Ave., Bethesda, 14, Md.

ELECTRODEPOSITION

72. Atmospheric corrosion resistance of electrodeposited nickel and chromium.
London, Mond Nickel Co., Ltd. Jly. 1959. 36p., (Bib. 59/1)

Bibliography of abstracts and articles, published mainly in English, French and German, arranged in chronological order (1916-1959).

73. Electrodeposition of chromium alloys; a literature review.
Charles Levy. Met. Finishing 57:59-62, 65. Aug. 1959.

Survey of literature (67 references) covering both composition and characteristics for deposition of Cr-Fe, Cr-Ni, Cr-Co, Cr-W, Cr-Mo and miscellaneous deposits.

74. Electrodeposition of nickel alloys (excluding proprietary solution such as nickel-cobalt, nickel-phosphorus, nickel-tin).
London, Mond Nickel Co. Ltd., Jly. 1959. 20p. (Bib. 59/3).

Some 50 abstracts of relevant literature, 1946-1959, arranged chronologically.

75. Stress in electrodeposited nickel.
London, Mond Nickel Co., Ltd., Jly. 1959. 14p. (Bib. 59/4)

About forty abstracts of relevant literature, 1952-1959, arranged chronologically.

EMBRITTLEMENT

76. Bibliography of the effects of hydrogen embrittlement on metals, 1952 to present.
Patricia E. Bell. Los Alamos, N. Mex., Los Alamos Scientific Laboratory, U. S. Atomic Energy Commission, June 3, 1959. 19p. (LAMS 2283).

Some 160 references, mainly concerned with the action of hydrogen on steel and Ti. Available at OTS.

77. Embrittlement of solid metals in a liquid metal.
W. A. Morgan. Metal Treatment 26:333-339, Sept. 1959.

Critical review of the literature which includes brief consideration of galvanizing embrittlement. There are 57 references.

GEOLOGY

78. Geoscience abstracts, v. 1, no. 1.
Washington, D. C. American Geological Institute, Jan. 1959. monthly.

This publication replaces Geological Abstracts. Coverage: maps, geomorphology; structure; stratigraphy; history; paleontology; geophysics; geochemistry; mineralogy; crystallography; geohydrology; mineral deposits; fuels; engineering.

79. History of the popularization of geology in America. A bibliographical survey.
Mark W. Pangborn, Jr. Wash. Acad. Sci. J. 49: 224-227, Jly. 1959.

31 references document this article.

HUMAN ENGINEERING

80. An annotated bibliography of vigilance studies. In Human Factors Problems in Anti-Submarine Warfare. Review and Critique of the Literature on Vigilance Performance.
J. J. McGrath, A. Harabedian and D. N. Buckner. Los Angeles, Calif., Human Factors Research, Inc., Dec. 1959. p. 67-100.

Contains references involving experimental studies of vigilance tasks, only. In addition to the annotations, further information is to be found in the discussions in the main part of the report.

81. Bibliography of sensory deprivation, isolation and confinement.
Benjamin B. Weybrew. New London, Conn., U. S. Naval Submarine Base, Naval Medical Research Laboratory, Jan. 1960. 13p. (Memo Rept. 60-1-).

An extension of Memo. Rept. 59-1 (Item 13-161, Winter 1959) including 146 references to add to the 84 previously listed. Of use in connection with studies of long submerged cruises in submarines, manned space vehicles, and defense situations wherein people make prolonged stays in bomb shelters.

82. Engineering psychology.
Arthur W. Melton and George E. Briggs. Annual Review of Psychology 11:71-98, 1960.

Emphasis of this review, which includes 158 references to open literature articles and reports, is placed on identification of human performance functions which are relevant, not only to the initial design (or redesign) of equipment components of man-machine systems, but also to the determination of operational procedures and work environments for the human operator.

ISOTOPES

83. Industrial applications of radioisotopes and associated techniques. A literature search.
Raymond L. Scott. Oak Ridge, Tenn., Atomic Energy Commission, Technical Information Extension Service, Nov. 1959. 28p. (TID 3539)

There are 268 unclassified literature references in this bibliography.

84. Isotope separation and isotope exchange. A bibliography with abstracts.
G. M. Begun. Oak Ridge, Tenn., Oak Ridge National Laboratory, Oct. 28, 1959. 239p. (ORNL 2852) (Contract W-7405-eng.-26) Avialable from OTS.

This is a complete revision, with 2497 references and author index, of TID-3036(rev.) issued on June 4, 1954 Period covered is 1907 through 1957.

METEOROLOGY

85. Annotated bibliography of tornado analysis and forecasting. Part II.
Geza Thuronyi. Meteorol. Abs. and Bibl. 10:270 307, Feb. 1959.

181 annoatted references for the period 1950-1958 covering theoretical aspects in particular, and the new techniques radar, sferics location and mesoscale synoptic analysis and their applications to tornado analysis and forecasting. Part I appeared in the May 1950 issue.

86. List of translations on meteorology and atmospheric physics.
Rosa E. Hay. Scott AFB, Ill., Air Force Weather Service, Apr. 1959. 140p. (AWS Bibl. 15).

A list of all knowl translations arranged in 2 parts: (1) an alphabetical listing by serials; and (2) a listing by author of those from non-serial publications.

87. Selective annotated bibliography on thunderstorm sferics (supplemented).
Geza Thuronyi. Meteorol. Abs. and Bibl. 10:588-624, Apr. 1959.

This 158 item annotated bibliography brings up-to-date a bibliography of the same title published in the November 1953 issue of Meteorological Abstracts and Bibliography.

MICROWAVES

88. Microwave propagation over rough surfaces.
M. P. Bachynski. RCA Rev. 2:308-335, June 1959.

Includes over 100 references.

89. Parallel-plate transmission systems for microwave frequencies.
A. F. Harvey. Inst. Elec. Engrs. Proc. 106B:129-140, Mar. 1959.

A review article on parallel-plate or strip, transmission lines of importance in mircrowave application. Includes 67 references.

90. Optical techniques at microwave frequencies.
A. F. Harvey. Inst. Elec. Engrs. Proc. 106B: 141-157, Mar. 1959.

A survey of the application of optical principles and techniques at microwave frequencies, concluding with a bibliography of 162 references.

MOLYBDENUM

91. A literature review on the use of molybdenum as an alloy in electrodeposits.
J. Z. Briggs. Plating 46:1370-1376, Dec. 1959.

Includes 55 references.

92. Molybdenum metal.
R. R. Freeman and J. Z. Briggs. ew York, Climax Molybdenum Co., Oct., 1959. 11p. (NP-8104).

This is a bibliography on phase diagrams of Mo alloys.

NICKEL PLATING

93. Bright nickel plating.
London, Mond Nickel Co. Ltd., Jly., 1959. 53p. (Bib. 59/6).

Chronological bibliography of references (in most cases with abstracts) to papers published from 1936 to 1959.

94. Effects of nickel plating on the fatigue strength of steel.
London, Mond Nickel Co., Ltd., Jly. 1959. 7p. (Bib. 59/2).

Abstracts in chronogical order, 1930-Dec., 1958.

PLASMA

95. Bibliography on plasma dynamics. In Symposium of plasma dynamics.
Reading, Mass., Addison-Wesley, 1960, p. 287-359.

An extensive bibliography is divided as follows: Plasma dynamics in astrophysics and geophysics; Plasmas (general considerations); Waves (general considera-otins); Boundary layers, turbulence, stability; Continuum plasma dynamics; Gas discharges-arcs, glows; Thermonuclear fusion; Electron beams; Aerodynamics, propulsion, heat transfer.

96. Current papers in plasma physics, accelerators, and thermonuclear research.
Plasma Physics-Accelerators - Thermonuclear research. Nuclear Energy Part C, 1:97-104, Oct., 1959.

This, the first of a projected listing in each issue of the new journal, includes publications appearing since January 1, 1959. Only authors and titles are included.

RADIATION

97. Bibliography of geomagenetically trapped corpuscular radiation.
James A. Van Allen. Advances in Astronautical Sciences 4:329-334, 1959.

An up-to-date bibliography (as of May 1959) of 58 items concerning work in the field of trapped radiation. Available in the volume comprising the Proceedings of the fifth annual meeting of the American Astronautical Society, Nov. 1958. Published by Plenum Press, Inc. New York.

98. Radiation application and fission product utilization. A bibliography of selected unclassified literature.
Gifford A. Young. Oak Ridge, Tenn., Office of Isotopes Development, AEC, Jly. 1959. 77p. (TID 3046, Suppl. 2) Available from OTS.

This supulehent continues the bibliographic control of information on radiosterilization, radiation-induced chemical reactions, other uses of high-intensiy radiation, and preparation and use of radiation sources begun by preceding publications TID-3046 and TID 3046 (Suppl. 1), 1360 references are included for the period June 1, 1955 to December 31, 1958.

99. Radiation detection. A literature search.
J. A. McCormick, Oak Ridge, Tenn. Atomic Energy Commission, Feb. 1959. 22p. (TID 3518).

This bibliography contains 335 selected references on detection and measurement of radiation from isotopes when used in physical and biological research.

Period covered is 1948-1957. Arrangement is alphabetic, by title. There is a separate author index. Available from OTS.

100. Radiation effects on selected structural metals. A literature search.
W. E. Bost. Oak Ridge, Tenn. Atomic Energy Commission, Nov. 1959. 15p. (TID 3538).

Included are 143 references (non-annotated) to unclassified reports on the subject of radiation effects on aluminum and aluminum alloys, brass, copper, and carbon and stainless steels. A few reports dealing with radiation effects measurement and mechanisms for metals in general are also included. Available from OTS.

101. Radiation processing.
E. J. Henley and H. W. Chandler. Ind. Eng. Chem. 51:1395-1402, Nov., 1959.

A review of chemical processing uses for ionizing radiation; radio frequencies; plasmas and discharges, solar, ultransonic and ultraviolet induced reactions includes an extensive bibliography.

102. Radiation shielding bibliography.
White Plains, N. Y., Nuclear Shielding Supplies and Service, Inc., 1959. 25p.

This is a listing, only, by personal or corporate author, of 331 references to periodical and report literature.

103. Radioactive decontamination. A literature search.
William E. Bost. Oak Ridge, Atomic Energy Commission, Technical Information Service Extension, Sept. 1959. 34p. (TID 3535).

This literature search includes 351 references to unclassified reports. Available from OTS.

104. Radioactive waste treatment and disposal — a bibliography of unclassified literature, Part 3.
J. O. Bloemeke. Oak Ridge, Tenn. Oak Ridge National Laboratory, Sept. 28, 1959. 28p. (CF-59-115).

Covers the period July 15, 1958 through July 31, 1959 and brings up-to-date bibliographies published as Cf-57-8-118 and Cf-58-7-77.

105. Techniques for handling radioactive metals. A bibliography.
A. C. Foskett. Harwell, Berks, Eng. U. K. Atomic Energy Authority. Research Group, Atomic Energy Establishment, June 1959. 37p. (Bib. 122).

Scope is restricted to actual handling. Period covered is July 1953 to December 1958. Previous work in the field is covered by AERE Inf/Bib 53 and supplements.

RESEARCH AND DEVELOPMENT

106. Bibliography of reference works for engineering research.
Russell Shank. New York, Columbia University, 1959. 73p.

A rounded list, 180 references in all, of guides, handbooks, encyclopedias, reviews, dictionaries and glossaries, indexing services, bibliographies and other material useful to reference work in a library which supprots engineering research. Subject divisions rae aeronautical engineering; chemical engineering; civil engineering; electrical engineering; industrial engineering; mechanical engineering, metallurgical engineering; mining and mineral engineering; and nuclear engineering. Available from Columbia University Bookmarily methodlogical in nature. Part III oriented restore, New York.

107. Bibliography on research administration, management, organization, production and use.
Houston, Texas, Science Information Associates, 1959. 23p.

This is an alphatically arranged listing of 176 items appearing in serial publications; and 75 items appearing in pamphlets, books and reference works. There are some annotations. With a few exceptions all have been published since G. P. Bush's "Bibliography on Research Administration", 1954. Available from Science Information Associates, P. O. Box 2284, Houston, Texas.

108. Fundamental research.
Atlanta, Ga., Georgia Institute of Technology, College of Engineering and Science, Dec. 1959. 111p.

Includes lists of publications, doctoral dissertations and abstracts of current research investigations in the fields of chemical engineering, chemistry, civil engineering, electrical engineering, mathematics, mechanical engineering, metallurgical engineering, physics and nuclear research.

109. Survey of operations and systems research literature.
M. W. Raben. Medford, Mass., Tufts University. Institute of Experimental Psychology, Jan. 1, 1960. 53p.

A state-of-the-art review of about 500 publications considered important by those working in the field. Part I reviews material relating to capabilities of men and machines; Part II reviews references primarily methodological in nature. Part III contains presentations of the more problem-oriented references.

SPACE SCIENCE

110. Aerodynamic phenomena in stellar atmospheres. A bibliography.
R. N. Thomas. Washington, D. C. National Bureau of Standards, Sept. 1959. 89p. (TN 30) (PB 151389).

This is a working bibliography, prepared with the cooperation of several countries, for the Fourth symposium on Cosmical Gas Dynamics.

111. Missiles, rockets, and space in war and peace.
Washington, D. C. Dept. of the Army, Aug. 1959. 94p. (Pam 70-5-6) (AD 22-8459L)

This bibliography is a continuation of Pamphlet 70-52, Missiles, rockets and satellites, published in June 1958. The present one contains approximately 1300 titles, partly abstracted and annotated, and selected from periodicals, books and studies. Only military offices may request from ASTIA. Others should request approval of Adjutant Gen. Office, Dept. Army, Attn. Publications Office, Wash. 25, D. C.

112. On the development of orbital techniques. A classification of orbital carriers and satellite vehicles.
H. H. Koelle. Internatl. Astronaut. Congr. Amsterdam. Proc. 9th, vl. II p. 702-746, Wien, Springer Verlag, 1959.

Includes a bibliography of about 850 references arranged in a subject classification such as artificial

satellites; satellite trajectories and orbits; ascent trajectories; circular and elliptic orbits; orbital carrier vehicles; design; environment use; cost; logistical aspects; and ground equipment and organizations.

113. **A partial search of the literature concerning the application of orbital space satellites to advanced weapons systems.**
A. M. Anzalone, Dover, N. J. Picatinny Arsenal, Feltman Research and Engineering Laboratories, Oct. 1959. 155p. (Lit. search 9, part 1. Space technology)

Although only a partial listing of references on the subject, 239 items are included, with lengthy annotations. Arrangement is alphabetical. A feature is the Unterm Index including subjects, contract and project and project numbers, item designations and personal authors.

114. **A space bibliography through 1958.**
Raymond Estep. Maxwell Air Force Base, Ala., Air University, Research studies Institute, Documentary Research Division, 1959. 109p.

This bibliography of 1832 annotated entries was prepared for the use of students and faculty members of the Air University, and covers books and periodicals for the period 1930 through 1958, available there. Other bibliographies on the subject are listed, p. 2-3.

SUBMARINE HABITABILITY

115. **Sumbarine habitability. A literature survey (1951-1959). A. Atmospheric control; B. Performance under stress.**
M. L. Nall. Washington, D. C. Documentation Inc., Man Machine Information Center, May 12, 1959. 31p. (M-MIC 1228) (Contract Nonr-2718(00)).

A sampling of 400 references gleaned from the National Library of Medicine catalogs which carries the literature search further than "A Bibliographic Sourcebook of Compressed Air, Diving, and Sub-marine Medicine", covering the literature up to Dec. 31, 1951, by E. C. Hobb and L. J. Greenbaum, Jr., vl. II, 368 p., issued by GPO in Nov. 1954.

116. **Human factor problems in anti-submarine warfare. Review and critique of the literature on vigilance performance.**
J. J. McGrath, A. Harabedian and D. N. Buckner. Los Angeles, Calif. Human Factors Research, Inc., Dec. 1959. 100p. (Tech. Rept. 1) (Contract Nonr-2649(00)).

Includes an annotated bibliography on vigilance performance.

TRANSLATIONS

117. **Bibliographies of translations. In Translators and translations. Services and Sources.**
Frances E. Kaiser, ed. New York, Special Libraries Association, 1959. p. 38-49.

Includes 83 sources of listings of available translations. Many of these are current abstract bulletins.

118. **Bibliography on machine translation of languages.**
D. F. Kennedy. Silver Springs, Md., Johns Hopkins University, Applied Physics Laboratory, Jan. 22, 1959. 27p. (TG 230-T76).

206 references, some annotated.

URANIUM

119. **Abstracts of atomic energy project unclassified reports and published literature on the actinide elements (Papers noted up to June 1958) Part III — uranium.**
R. W. Clarke. Harwell, Eng., Atomic Energy Research Establishment, 1959. (Bib. C/R 2472) 53p.

There are 612 references covering chemistry, physics, metallurgy, nuclear properties and some medical aspects of uranium. Available from HMSO.

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SECTION, CHAPTER AND COMMITTEE NEWS

(Starts on Page 43)

brarian, arranged a demonstration of microfilm and copying equipment and described her library's microfilming project.

Miss Cally Dolly, RCA Croydon Plant, discussed data processing and retrieval for the DAMP project at a meeting held at the new Drexel Library Center on April 28, 1960. There was an opportunity to tour the Center, especially the Engineering Reading Room.

ALABAMA CHAPTER

A **Union List of Health Science Periodicals** available in Alabama libraries has been published by the Alabama Chapter of SLA. Holdings of 25 medical and science libraries for about 900 titles are included. O. T. Chambers, Librarian, Medical Service School, Gunter AFB, was chairman of the committee compiling and editing the list.

RIO GRANDE CHAPTER

The Rio Grande Chapter can report marked progress on its projected DICTIONARY OF REPORT SERIES. Begun three years ago, the dictionary will cover as many report series codes as can be discovered from the extensive report catalogs in the libraries of chapter members and also from printed sources such as the list issued by the Technical Information Service of the AEC and that included in ASTIA's list of corporate authors. Two alphabets are planned, one arranged by report series designation giving as much identification as possible, and the other arranged by agencies. In addition there will be a discussion of report codes — how they are formed, who assigns them, and the bibliographic problems they pose — and extensive notes on some of the most complicated types of series.

The bulk of material for the dictionary has already been compiled and is currently being transferred to IBM cards. As soon as editorial work can be completed on a representative sample, the Chapter will begin casting about for ways of publishing it.

Baltimore Chapter News

The Baltimore Chapter has voted a token grant of support for the Maryland Union List of Serials, a project initiated by William Filby of the Peabody Institute Library.

A fund raising drive for the SLA Scholarship Fund is being carried on in the form of a theater party, on May 5, managed by Jane Parkhill and Arlene Grede.

AUTOMATION IN TECHNICAL

(Starts on Page 42)

would need the aid of at least one full-time employee if the production of AEDC reports continued to remain at the current level, over 200 per year, with no provision for any further increase in the number of reports to be distributed in the near future.

Based on the operation of this system for the past two months, the benefits gained by this changeover to EAM are impressive: (1) the printing of labels and receipts by EAM has eliminated the necessity of hiring another employee to assist in making report distribution by the Technical Files Section; (2) the amount of time spent in handling the distribution of a classified report has been reduced from 15 minutes per report to approximately 5 minutes per report; (3) no increase in personnel or machinery was necessary to handle this additional work load in the Tabulating Services Branch of ARO, Inc.; (4) the use of IBM cards for sorting the addresses listed in the MDL permits the accumulation and storage of the many variations in addresses which occur frequently and provides the interested departments within ARO, Inc. and the Air Force with an up-to-date and accurate listing of qualified recipients for the primary product of AEDC — technical reports; and (5) the MDL is now revised and published with much less effort than was previously expended in its preparation.

The savings in time and money which this method has achieved is small considering the overall cost of operating AEDC, but it is an indication of the benefits which were realized by adapting automation to the distribution of technical documents.

MIT'S CURRENT SERIALS AND JOURNALS

A Third Edition dated January, 1960 of "Current Serials and Journals in the M.I.T. Libraries" produced through the combined processes of IBM punched cards and photo-offset techniques is now available. The new edition contains approximately 4,000 titles, and is available at $15 per copy. Orders should be addressed to the Director of Libraries, Massachusetts Institute of Technology, Cambridge 39, Massachusetts.

Longhand Library Record

(Starts on Page 38)

tion in this respect is, of course, the one already described — handling inquiries about serials holdings. Where, however, (1) a written message is necessary (say for taking to the stacks) or advisable (for the sake of detailed accuracy, as in asking the central Translation Service if an obscure Russian article is available in translation) and where (2), a rapid transaction is required, many additional uses suggest themselves.

Instant long-distance longhand will not supplant the telephone, the typed memo, the routed book selection tool, multiple photoprints and similar media of library communication. The moving finger of the message automaton is, however, a promising new ally in the efficient conduct of library business.

FROM A TO Zz
SHIFTING UCLA'S CARD CATALOG

By ELEANORE FRIEDGOOD, Library,
University of California at Los Angeles

Thirty years ago the Public Catalog of the UCLA library consisted of two four-sectional cabinets. In December, 1959, ten multisectional cabinets housed the two and one-half million cards which make up the master Catalog for the campus. In January, 1960, still another unit was ready to be added, and a total shift of catalog cards from A to Zz was imminent.

From past experience, we were well aware that such a move is no simple operation. Each time the occasion arises, the task becomes more onerous and more complex. By way of sheer numbers of cards, trays, and labels, it is a ponderous project. We began preparations about a month before the time set for the actual physical shift. A series of charts made up of numbered squares corresponding to the numbered catalog drawers represented our full Catalog of two thousand, seven hundred and seventy-two trays. On these charts all the working data of the operation was duly noted. By measuring the number of cards in each tray in terms of centimeters and by dividing the total sum of all the cards by the total number of trays in the Catalog, we arrived at the number of centimeters of cards we would have per tray in an equalized new division. The revised space for each drawer was set at 22 to 22.5 cm. Control points at every 36 drawers were set up and the estimated space allocated for these trays was carefully measured. To an engineer, an accountant, an architect, or an atomic scientist, the calculations involved would have been child's play. But to librarians who are concerned chiefly with books and their subject matter and with making these readily available to library patrons, the juggling of figures does not come naturally. Fortunately, we had arranged for a control point at every thirty-sixth square on our charts; and at this juncture we were brought face to face with our errors in addition, subtraction, and multiplication.

After some feverish computation, we had calculated on paper the exact numerical divisions of cards in each tray and the alphabetical divisions which would occur at our control points. In actuality, however, we had to allow for further adjustments in consideration of the best possible breaks in alphabetical groupings and in consideration of the limitations of space on our labels for the trays. For instance, if our mathematical division bisected the cards on Henry James at a crucial section, we sacrificed numerical accuracy for alphabetical convenience.

After measuring off the cards in each tray and inserting numbered markers where each drawer in the new arrangement would begin, and after deciding on the alphabetical breaks and making up the list from which our typists would produce new labels, we could contemplate the physical move. Since at no time is the Public Catalog free from traffic by patrons, staff, faculty and students, we chose that short interval between fall and spring semesters when, presumably, catalog traffic would be at low ebb as the best time for our next step. Working in teams, we moved first those cards which were destined for the new cabinet which, by necessity, had been placed in the middle of the Catalog. As soon as a section of trays was emptied, a team moved in to fill them up. In two days, the physical shift from A to Zz was completed. By noon of the third day, all the new labels were in place. Although we worked rapidly—finishing the project in record time — those two and one-half days were bedlam for the unsuspecting patrons who wandered in to consult the UCLA Library Catalog. Of course it would happen just at this time that a distinguished visitor and generous donor of rare books arrived to check our holdings in certain areas. However, he was not at all dismayed; rather, he was intrigued by our activity and, having found the items, he was interested in, left in excellent humor and quite gift-minded.

From beginning to end, we were forced to wage a battle with Time. We could not begin the behind-the-scenes paperwork until the whole Catalog had been measured. We could not begin to measure until a short time before the actual shift would take place because we file hundreds of new cards every day. We could not begin to prepare the new labels until the numerical and alphabetical divisions were exactly and irrevocably made. And we could not begin the physical move until such labels were ready to be inserted immediately. Nevertheless, taking each step in turn, we reached a happy conclusion with cards, trays, labels, etc. coming out even and all things accounted for.

* * *

Assoc. Editor's note: If anyone is to be involved in a large catalog shifting project, it is suggested you request a review of details from Mrs. Friedgood of the UCLA Library, Catalog Dept.

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ABSTRACTING AND INDEXING

The Efficient Use of Printed Index Cards in Documentation.

94 H. Wellish. UNESCO Bull. Lib. 14(1): 13-16 Jan.-Feb. 1960.

The problems of adapting, filing, interfiling, overlapping and wedding of printed index cards available from bibliographical services are discussed. —DTH

Experience in the use of unit concept coordinate indexing applied to technical reports.

95 A. Johnson. J. DOCUMENT. 15(3):146-155 Sept. 1959.

Use of unit concept indexing by British Insulated Callender's Cables Limited. —RJH

New Indexing of U. S. National Library of Mericine.

96 Seymour I. Taine. UNESCO BULL. LIB. 13(11-12):253-255 Nov.-Dec. 1959.

The use of unit citations and the Listomatic camera helps speed up the production and indexing of the new Index Medicus. (This is an abstract of an article in the Med. Lib. Asso. Bull. 47(2) Apr. 1959.) —DTH

Training of patent abstractors for Chemical Abstracts.

97 G. O. Platau. Am. Document. 11(1):40-43 Jan. 1960.

Description of the training program used at the Chemical Abstracts Service for preparing abstractors to work in the peculiarly difficult field of abstracting patents, keeping in mind the needs of the chemist. —MEM

BIBLIOGRAPHY

An evaluation of U. S. Document Bibliography.

98 Philip Shore. LIB. RESOURCES & TECH. SERV. 4(1):34-43 Winter 1960.

The survey conducted among librarians in 1956 concerning U. S. Government document bibliography suggest improvements, particularly in indexing. —MT

International bibliographical work: some thoughts on two UNESCO reports.

99 H. Coblans. J. DOCUMENT. 15(3):141-145 Sept. 1959.

UNESCO has made a valuable conrtibution through its support of international bibliographies but good bibliography practice can and must be demanded by UNESCO as a condition of financial support. UNESCO must have enough courage to establish interim codes and at least insist that its bibliographies measure up to these norms. —RJH

The mathematical foundations of bibliographic organization.

100 T. Minder. Am. Document. 11(1):2-8 Jan. 1960.

A relation between elements of bibliographic organization exists just as a relationship exists between elements in mathematics. Knowledge and information are explained in mathematical terms. —MEM

Soviet bibliographical projects.

101 E. Beyerly. Am. Document. 11(1):44-54 Jan. 1960.

Discusses two Russian bibliographies of bibliographies: General bibliographies of books in Russian printing type, 1708-1955, by V. M. Sokurova, and General bibliographies of Russian periodicals 1703-1954 and statistical materials of the Russian press, by M. V. Mashkova and M. V. Sokurova. —MEM

The work of an international committee in the field of bibliography.

102 B. Kyle. STECHERT-HAFNER BK. NEWS 14(5):53-54 Jan. 1960.

Description of the work of the International Committee for Social Scvience Documentation. Includes a list of their publications. -EBS

BOOK TRADE

The Florence agreement on the importation of educational, scientific and cultural materials.

103 R. W. Frase and S. C. Brown. PHYS. TODAY, 13(2) 26, 28, 30 Feb. 1960.

The Florence agreement is an international convention that provides for duty-free entry of scientific apparatus, books, etc. The U. S. seems about to join. Such an act would reduce cost of imported books and increase exports to signatory countries. —AVN

Paperbounds: the revolution in book distribution patterns.

104 D. Melcher. LIB. J. 85(2):179-182 Jan. 15, 1960.

Paperbounds are the fastest growing segment of the book industry and, in terms of copies sold, the largest. Librarians should keep an open mind about the paperback revolution and encourage it. This may be the most far-reaching breakthrough in the history of book distribution. —EBS

CATALOGING AND CLASSIFICATION

The Approval of Basic Order of the Soviet Library Classification.

105 LLU TRANS. BULL. 2(2):129-133 Feb. 1960.

This is an English translation of a Russian article in Sovetskaya bibliographia 1959 (3) 102-104 concerning the establishment of the basic order of the Soviet Library classification scheme based on the Marxist-Leninist classification of science. —DTH

Automated catalog card reproduction.

106 N. W. Johnson. LIB. J. 85(4)725-726 Feb. 15, 1960.

A brief preliminary description of the system installed at the California State Library, Sacramento, Calif. —EBS

Cataloging in source.

107 Orcena Mahoney. ALA. BULL. 54(3): 197-201 Mar. 1960.

After a summary of the beginnings and purposes of the cataloging in source project (supplying cataloging information with works when published), undertaken July 1958 to Feb. 1959 with the help of the Library of Congress, the technical problems encountered are discussed. The main problem is acquiring accurate descriptive cataloging details. The publishers, on the whole, are willing to work out problems if this project proves worthwhile to librarians. The results of a survey indicate that librarians are pleased with the results and would like the project made permanent. Among the dissenters are the guinea pig LC catalogers. —ARB

Cataloging practices and problems in selected military academic libraries.

108 Robert K. Johnson. LIB. RESOURCES & TECH. SERV. 4(1):71-8 Winter 1960.

Cataloging practices in the 18 libraries surveyed vary because of staff size, materials processed, and adaptation to meet local needs.

DDC for chemistry.

109 CHEM. ENG. NEWS 38(12): 74-75 Mar. 21, 1960.

Comments received by Benjamin A. Custer, Editor of the Dewey Decimal Classification, Library of Congress, will determine in part the decision as to a detailed expansion of Classes 540 and 660. —AMC

A fresh look at the treatment of documents.

110 Wilhelm Moll. LIB. RESOURCES & TECH. SERV. 4(1):43-44 Winter 1960.

The increasing volume of government publications suggest that separate policies should be established. Among these are little or no cataloging, relying on the use of existing bibliographies, use of microfilm, etc. —MT

IFLA International cataloguing conference; preliminary meeting.

111 Mary Piggott. LIB. ASSN. REC. 62(1): 25-26 Jan. 1960.

The preliminary meeting attended by representatives of fifteen countries outlined six areas of difference of opinion which it is hoped to resolve at a conference planned for 1961. —SJK

International Federation of Library Associations Internation Cataloging Conference.

112 UNESCO BULL. LIB. 13(11-12):266-269, 292 Nov.-Dec. 1959.

Preliminary plans for the Conference to be held in Paris in April or September 1961. —DTH

Library resources.

113 CHEM. ENG. NEWS (38)4:80 Jan. 25, 1960.

In its third annual report the Countil on Library Resources records grants and contracts totaling over $1.25 million going toward support of 35 projects for improvement of library work. The grants include: $244,651 for a union catalog of the serial publications in libraries of the U. S. and Sanada, $201,531 for development of a mechanism for photographic storage of library material at a high ratio of reduction, and $200,00 to LC for creation of a national union catalog of manuscript collections. JAMC

A loan collection of library classification schemes.

114 CHEM. ENG. NEWS 38(12): 75 Mar. 21, 1960.

Contributions of classification schemes for specific types of material or for specific subjects are invited for the SLA Loan Collection, Dr. Jesse H. Shera, Curator, School of Library Science, Western Reserve University. —AMC

Moving toward international cataloging agreement.

115 Susan M. Haskins. ALA. BULL. 54(3): 194-196 Mar. 1960.

The work of the International Federation of Library Associations Working Group on the Coordination of Cataloging Principles has done much in recent years to advance international agreement on basic cataloging principles, especially reconciliation between the Anglo-Saxon and German cataloging traditions. —ARB

Universal classification — untenable.

116 Vern M. Pings. LIB. RESOURCES & TECH. SERV. 4(1):5-13 Winter 1960.

A universal classification scheme can not be organized as we live in a world of progress and expanding knowledge. —MT

COOPERATION BETWEEN LIBRARIES

Co-operation between the National Lending Library and public libraries.

117 D. J. Urquhart. LIB. ASSN. REC. 62 (2):50-52 Feb. 1960.

"The main aim of the National Lending Library is to assist the practitioners of science". At present the prospects for cooperation are small since in general the public libraries do not get the specialized demands which the N. L. L. hopes to fill. —SJK

Electronic transmission for interlibrary loans.

118 E. F. King, Am. Document. 11(1):32-39 Jan. 1960.

A consideration of the economic and technical problems relating to fascimile and other forms of electronic transmission as a substitute for interlibrary loans. —MEM

Latin-American cooperative asquisitions project.

119 R. E. Kingery. STECHERT-HAFNER BK. NEWS 14(6)65-66 Feb. 1960.

The University of Texas, The New York Public Library, and Stechert-Hafner are launching the LACAP project, which will greatly improve the coverage of Latin-American imprints by research libraries in the United States. —EBS

The organization of libraries in the United Kingdom.

120 S.P.L. Filon. ASLIB. PROC. 12(1):7-19 Jan. 1960.

The main types of library are the national, public, university, and special. Several cooperative and interlibrary schemes extend their resources. —MT

DOCUMENTARY REPRODUCTION

Document reproduction: a discussion forum.

121 Gordon H. Wright. ASLIB. PROC. 12(1):20-29 Jan. 1960.

Book copiers, catalog card reproducers, microcards and microfilm equipment available in Great Britain are discussed by members of a panel giving cost consideration and merits of some of the equipment. —MT

Fairchild breaks sound barrier in 8-mm movies.

122 BUSINESS WEEK No. 1587:70-72 Jan. 30, 1960.

Although chiefly a home movie camera this compact economical unit could be used for audio-visual recordiing of information. —AVN

Microfilm cuts paperwork in state motor vehicle department.

123 Ind. Phot. 9(3):116-118 Mar. 1960.

The Title and Anti-Theft Division of the Connecticut Department of Motor Vehicles retires paper work immediately by microfilming title records daily. This cuts down on needed file space, keeps records handy, avoids errors in copying numbers and provides maximum protection for these vital records. —MEM

Microfilm in the defense program.

124 Photo Methods for Industry 3(3):41 Mar. 1960.

Describes standardization plan for the use of microfilm by Army, Navy and Air Force. —MEM

Microflim to cut red tape for Air Force contractors.

125 Prod. Eng. 31(11):15-16 Mar. 14, 1960.

Air Force is requiring that all engineering drawings from contractors be submitted on 35 mm microfilm, along with aperture cards on which the film can be mounted. Adoption of system by Army and Navy depends on evaluation of this 3 yr. program. —MEM

Microtexts.

126 RESEARCH (London) 8(2):78 Feb. 1960.

Due to English copyright laws granting free copies of English thesis to five depository libraries, the additional demand for copies in Microtext would make it difficult to recover the cost of production. —RJH

DOCUMENTATION - GENERAL

Foreign Medical Directories.

127 K. L. Uhler, Bull. Med. Assoc. 48:44-78 Jan. 1960.

Partial supplement (1941-59) to Strieby's checklist (1930-40) arranged alphabetically by country. Annotations and simple tabulations of content have been included, and prices where possible. Revised list is restricted to medical profession. For those countries where no medical directory has been published, other sources of pertinent information except telephone directories have been cited. African sources remain understandably sketchy, mainly the old colonial lists. —HO

Interlingua.

128 NATURE. 185(4713):587 Feb. 27, 1960.

A review of the need for an international scientific language and some of the uses of Interlingua in scientific publications are discussed. —RJH

The principles of patentability.

129 Giles S. Rich. J. Pat. Office Soc. 42(2): 75-91 Feb. 1960.

The patent law states that inventions which are new, useful and unobvious are patentable to inventors. The system is not concerned with the progress of the individual inventor but with the overall advance of technology. —BC

Production of a lexicon of trivial names of chemicals.

130 CHEM. ENG. NEWS 38(3):71 Jan. 18, 1960.

The Synthetic Organic Chemical Manufacturers Assn. has offered to aid Chemical Abstracts Service if it will assume responsibility for a lexicon of trivial names of chemicals. —AMC

Published in the U. S. S. R. Vol. 19, Slavic and East European Series.

131 B. I. Gorokhoff. Bloomington, Indiana University Publications, 1959. 306p. $3.00.

A sizable portion of the study is devoted to Soviet scientific and technical publishing of books, dissertations, patents, and standards. The difference between publishing practices in the U. S. and Soviet Union are well characterized and a description is given of the network of academies, committees, and institutions, organized in coordinated activities of abstracting, reviewing, and translating foreign literature. —VM

The scope and organization of bibliographic centres with particular reference to France and Denmark.

132 Peggy Heeks. LIB. ASSN. REC. 62(2): 46-49 Feb. 1960.

A comparison of the activities of the bibliograhpic centers of France and Denmark with those of England. Each has adapted its services to meet most of the needs of the country's libraries. —SJK

DOCUMENTATION RESEARCH

Centralized information services: opportunities and problems.

133 Allen Kent and James W. Perry. Cleveland, Ohio, Western Reserve Univ. Press, 1958. 156p. $5.00.

HI

Computer invades library to speed up research.

134 Jay Gassett. Chem. Processing 23(3): 5 Mar. 1960.

Editorial discusses work at Western Reserve University's Center for Documentation and Communication Research and possibility of a World Document Center from which information could be obtained by subscribing companies via teletype and photofacsimile. —MEM

Machine in Russia may displace chemist.

135 CHEM. ENG. 67(3):62 Feb. 7, 1960

According to Tass, Soviet scientists are working on a machine which would scan functional groups of molecules to choose the best compound from millions of possible ones, and on another which would convert chemical formulas to linear mathematical ciphers, store, and retrieve the ciphers. —AMC

INFORMATION STORAGE AND RETRIEVAL

Cryotrons and other superconducting computer devices: recent advances.

136 J. M. Lock. RESEARCH (London) 8(2): 49–54 Feb. 1960.

Discussion of the "Cyrotron," the "Strip Cyrotron," the "Crowe Element" and "problems of a low temperature computer." —RJH

Document Analysis and Information Retrieval.

137 J. C. Gardin. UNESCO BULL. LIB. 14(1):1-5 Jan.-Feb. 1960.

Even though machines are spectacular in their speed and ability to handle large masses of documents, the most important element in the mechanization of documentation work is still the analysis of the documents into language usable by these machines. —DTH

Electronics puts speed into searching of technical literature.

138 A. Kent. PROD. ENG. 31(1):15 Jan. 4, 1960.

Description of systems and services of the ASM-NSF Metals Documentation Service. —RJH

Machines and indexes.

139 B. C. Vickery. UNESCO BULL. LIB. 13(11-12):249-252 Nov.-Dec. 1959.

A discussion of what machines can and cannot do. Purely clerical operations lend themselves readily to mechanization. More research is needed in semantics, subject analysis and coding. —DTH

Machine Searching for Chemical Structures.

140 E. G. Smith. SCIENCE 131(3394): 142-146 Jan. 15, 1960.

A method has been developed for locating data about organic compounds by means of punched card techniques on a standard IBM sorting machine. The method combines machine sorting and visual inspection made possible by the Wisswesser notation. —VM

McBee has another small machine.

141 DATAMATION 6(1):17 Jan./Feb. 1960

The RPC-4000 is a desk-size machine. Its drum memory has an 8,008 word capacity. It is fast with basic punch speed of 30 characters per second. It is transistorized, and will be available in July, 1960. —AVN

Model 160 makes debut.

142 DATAMATION 6(1):48 Jan./Feb. 1960

Control Data Corp. has brought out a new desk-size computer with a "magnetic core memory of 1496 twelve-bit words." Execution time approximates 15 microseconds per instruction for an entire program. It will appear in the spring of 1960. —AVN

A practical system for documentation.

143 E. Wall. LIB. J. 85(5):889-897 Mar. 1, 1960.

An abbreviated version of a paper given at the Building Research Institute's Fall Conference Workshop on Building Research, Nov. 1959, describing what is being done at du Pont as well as discussing the basic principles for any workable system of information storage and retrieval. —EBS

Primer in machine information storage and retrieval.

144 D. Melcher. LIB. J. 85(5)909-912 Mar. 1, 1960.

Five points are made, two of which are: (1) the problem of information indexing is separable from the problem of information storage, and should be thought of separately, and (2) machine information storage and retrieval will come first and fastest in the non-book area of the "extra-special" library. —EBS

Thermoplastic recording system has many possible applications.

145 ELEC. ENG. 79(3): 251-253 Mar. 1960.

A new recording system called "thermoplastic recording" (TPR) has been announced by General Electric. The recording is made in the form of ripples on the surface of a thin film of thermoplastic material on a base similar to motion picture film base. The ripples are formed by a scanning electron beam and the output may be either an optical image or an electrical signal. The optical image may be either black-and-white or color. It is claimed that 100 times as much information can be concentrated in the same space as can in magnetic recording and that it has the potential of even greater concentration. It is suggested that, in principle, all 24 volumes of Encyclopedia Britannica could be recorded on a small reel at the rate of one volume per minute. Present possible applications include use in remote "cameras" in satellites and a variety of information handling systems. —REB

TPR: New route to ready information.

146 CHEM. ENG. 67(5):82-83 Mar. 7, 1960

GE announces Thermoplastic Recordings, which can concentrate 100 times as much information in a given space as can magnetic recording, can produce pictures in black-and-white or color without chemical processing. —AMC

LIBRARY ADMINISTRATION

The library's new role.

147 K. J. Gesterfield. ATLANTIC MONTHLY 205(4):69-71 Apr. 1960.

Rather than an explanation of a new role, the article is intronsically a restatement of the Library's continuous growth and change. —AVN

To assist in solving the problems of libraries.

148 Verner W. Clapp. ALA BULL. (54(3): 187-193 Mar. 1960.

A discussion of the program of the Council on Library Resources, including its research aims: improvements in 1) bibliographic access to books; 2) physical access to books; 3) administrative arrangements which make the first two possible; 4) planning of research and development in the first three areas. The 85 projects sponsored by the Council in the past three and a half years are summarized briefly. —ARB

LIBRARY PLANNING

The "half-life" of some scientific and technical literatures.

149 R. E. Burton and R. W. Kebler. Am. Document. 11(1):18-22 Jan. 1960.

A consideration of the analogy between the half-life of radioactive substance and the rate of obsolescence of scientific literature. May make possible more accurate prognostications concerning the period of time during which scientific literature may be used. —MEM

LIBRARY EDUCATION AND TRAINING

Modern trends in library service.

150 M. Boaz. LIB. J. 85(4):727-729 Feb. 15, 1960.

A good basic outline which might well act as a model for others planning talks to lay or student groups. —EBS

PROFESSIONAL ASSOCIATIONS AND SOCIETIES

The British association for the advancement of science.

151 Endeavour, 19(73): 25-26 Jan. 1960.

The aim of the association and the new activities which motivate the popularization of science are described. —BC

The fighting fifties; an informal review of the Association's activities during 1950-59.

152 D. D. Haslam. LIB. ASSN. REC. 62(1): 2-10 Jan. 1960.

The Association is the Library Association of England. —SJK

What ALA means to the library profession.

153 W. P. Kellam. LIB. J. 85(6):1055-1057 Mar. 15, 1960.

The author takes stock of what a strong national association has done for libraries and librarians. —EBS

SPECIAL LIBRARIES AND INFORMATION SERVICES

Aimes and Purposes of Scientific Information

154 A. I. Mikhailov. UNESCO BULL. LIB. 13(11-12):262-265 Nov.-Dec. 1959.

A survey of the publications and other activities of the All-Union Institute of Scientific Information, U.S.S.R. Academy of Sciences. —DTH

The Center for Documentation and Communication Research at Western Reserve University.

155 Allen Kent and J. W. Perry. UNESCO BULL. LIB. 13(11-12):256-261, 265 Nov.-Dec. 1959.

A description of the different activities of the Center. —DTH

Information in the building industry.

156 ASLIB PROC. 12(2):51-81 Feb. 1960.

The following papers were presented at a conference in London, December 9, 1959: Existing services: a review of the present position, by B. Agard Evans; What the building team wants, by W. Keith Martin; and a panel discussion between users and purveyors. —MT

A list of services and periodicals in special libraries in the Chicago area.

157 ILLINOIS LIBN. 41(9-10):654-710, 749-792. Nov.-Dec. 1959 —ARB

The organization of reference work in a special library.

158 J. Bird. UNESCO BULL. LIB. 14(1):6-9, 12 Jan.-Feb. 1960.

A concise treatment on the selection, acquisition, and organization of the material, and on the procedures and staff for reference work in a company library. —DTH

Portfolio No. 19: The Photographic Library at Standard Oil Co. (N. J.)

159 Photo Methods for Industry 3(1):52-57 Jan. 1960.

Collection of photographs with descriptive captions from the Photographic Library at Standard Oil Co. (N. J.) —MEM

The Royal Institution and its library.

160 K.D.C. Vernon. LIB. ASSN. REC. 61 (11):283-289 Nov. 1959.

Since its foundation in 1799 the Royal Institution has gathered a library rich in many fields of scientific knowledge. A recent reorganization has increased availability and usefulness. —SJK

Soviet science information services.

161 D. B. Baker and M. Hoseh. CHEM. ENG. NEWS 38(2): 70-73, 75 Jan. 11, 1960.

Representatives of the National Federation of Science Abstracting and Indexing Services report on an inspection of corresponding foreign services, especially in the USSR. The operation of the All-Union Institute of Scientific and Technical Information (VINITI), in which Soviet science information work is centralized, is described. VINITI issues Refrat. Zhur., Khim. and Ekspress Informatsiya, a publication containing long reviews giving essential technical data from about 2100 foreign journals. RZK indexes are six years behind. —AMC

Theological and philosophical libraries in Scotland.

162 J. A. Lamb. LIB. ASSN. REC. 61(12): 327-333 Dec. 1959.

A descriptive list of the major libraries of the church bodies and university faculties in Scotland in the field of religion and philosophy. —SJK

United Kingdom hospital library services.

163 NATURE. 185 (4713):589 Feb. 27, 1960.

A review of the needs for hospital services and standards as expressed in the report: Hospital library services: A pilot survey. Report of an independent committee sponsored by King Edward's hospital fund for London, 1959. —RJH

Vatican film library and special facilities housed at St. Louis U.

164 V. D. Tate. Photo Methods for Industry 3(2):21-22, 24 Feb. 1960.

Describes the facilities for housing and using the Knights of Columbus Vatican Film Library at St. Louis University. This microfilm library provides a means of preserving the priceless collection in the Vatican Library and also makes this reference material available to students in the United States. —MEM

What's new in public library service to business.

165 R. Vainstein. LIB. J. 85(5):913-918 Mar. 1, 1960.

Includes a list of those Canadian and U. S. public libraries with special business departments or services as of January 1960. —EBS

TECHNICAL PROCESSES

Cooperative centralized processing at the Library Service Center of Eastern Ohio.

166 Mary Lathrop Eckford. OHIO LIBN. ASSN. BULL. 30(1):9-12 Jan. 1960.

A brief discussion of advantages of cooperative acquisitions and cataloging, followed by the details of the Center's arrangement, routines and plans for the future. —ARB

Effects of printing types and formats on the comprehension of scientific journals.

167 NATURE. 184(4701):1824-25 Dec. 5, 1959.

An experiment was carried out to determine the relative comprehensibility in scientific papers of four different styles of printing. Single column passages in larger type are more comprehensive than double-column passages in smaller type. Reference is made to a more complete report. —RJH

Library technology at work.

168 Frazer G. Poole. ALA BULL. 54(1):44-46 Jan. 1960.

A six-months report of the Library Technology Project, a broadly conceived research-testing-standardizing program in the field of library supplies, equipment and systems. The article covers activities and future plans in 1) collection and dissemination of standards information; 2) development of new and improved equipment and supplies; 3) providing librarians with a technical information service covering materials, machines, equipment, etc., useful in library operations. —ARB

Multiple binding-instruction form.

169 Marianne Von Dobeneck. LIB. RESOURCES & TECH. SERV. 4(1):59-62 Winter 1960.

The Columbia University Building Department has introduced a multiple binding-instruction form which has resulted in economies of time and greater efficiency. —MT

The Organization of Bibliographical Work for the Acquisition of Foreign Stocks in Scientific Libraries.

170 P. I. Ezorov and K. V. Lyutova. LLU TRANS. BULL. 2(2):134-149 Feb. 1960.

This is an English translation of a Russian article in Sovet-skaya bibliografia 1959(3) 25-34 concerning the acquisition procedures of the Library of the Academy of Sciences of the USSR. The references used for the selection of foreign materials are mentioned. —DTH

Teletypewriter equipment speeds up library service.

171 ELEC. ENG. 79(3):260 Mar. 1960.

The Free Library of Philadelphia is utilizing Kleinschmidt teletypewriters to transmit requests from patrons at the call desk to the stack area. In spite of very heavy use, the elapsed time from request to receipt of books is now 8 to 12 minutes. —REB

TECHNICAL WRITING AND EDITING

Speed words.

172 G. A. Speedie. Am. Document. 11(1): 23-31 Jan. 1960.

Accepted laws of an electric system are used to suggest parallel laws for word frequency and understandability. —MEM

Technical societies guide: procedures required for presenting technical papers.

173 Industrial Publicity Assn., N. Y., 1958. 32p. $3.00.

Writing and publishing your technical book.

174 F. W. Dodge Corp., N. Y., 1959. 50p. No. charge.

TRANSLATION

Automatic translation of Russian.

175 CHEM. ENG. NEWS 38(12):75 Mar. 21, 1960.

At the Harvard Computation Lab. a Univac has been programmed to put out a sheet containing an original Russian sentence, and for each word its various possible equivalents in English and its grammatical role in the sentence. —AMC

EPA plans center for Soviet translations.

176 PROD. ENG. 31(9):17 Feb. 29, 160.

Future plans for a central agency in Europe to collect and circulate translations of Soviet and Eastern European technical journals and books. The proposed European Translation Center will be a project of the European Productivity Agency and patterned after the OTS-National Science Foundation in the United States. —RJH

German sentence recognition.

177 G. H. Matthews nad S. Rogovin. MECH. TRANS. 5(3)114-20 Dec., 1958.

This paper describes an actual program in the M.I.T. programming language. This language is being adapted for an IBM 704. Although the system will not recognize all German sentences, it nevertheless points the way to sub-routines which may help to recognize constructions not now included in the program. The paper is based on a theory of language which recognizes an immediate constituent structure in each sentence of any given language. —AVN

It's hard to teach a machine to translate.

178 D. R. Swanson. N. Y. HERALD TRIB. ENGRS. NEWS SUPP. Section 11:2 Feb. 7, 1960.

Language translation involves "meaning" and "syntax." It is difficult for present machines to distinguish between these. No quick solution can be found. However, rough translations can be made economic and practical. —AVN

Order of subject and object in scientific Russian when other differentia are lacking.

179 D. G. Hays. MECH. TRANS. 5(3):111-13 Dec. 1958.

"If two nouns in a sentence cannot be distinguished as subject and object of a transitive verb by their morphological properties, and if one precedes the verb while the other follows, the first noun is the subject." —AVN

A progress report on machines to learn to translate languages and retrieval information.

180 J. Solomonoff. Cambridge, Mass. Zator Co., Oct. 1959. Rept. on Contract AF 49(638)376 (PB161, 263); thru U. S. Gov. Research Repts. 33(2):218 Feb. 12, 1960.

This paper discusses theoretical work which would make it possible for a machine to be programmed to learn to translate two simple, synthetic languages. A system is described in which a machine would learn to assign descriptors or other search indices to documents. A unified method is proposed for resolving difficulties of both the problems. —BC

Research work in the field of machine translation in the Chinese People's Republic.

181 Liu Yung-Ts'uan. LLU TRANS. BULL. 2(2):66-72 Feb. 1960.

This is an English translation of a Russian article in Voprosy yazykoznaniya 1959(5) 102-104 concerning research work mainly in Russian-Chinese translation, but some research in English-Chinese translation is also being done. —DTH

A survey of Soviet work on automatic translation.

182 A. G. Oettinger. MECH. TRANS. 5(3): 101-110 Dec. 1958

A literature survey which has the objective of acquainting English-speaking workers with information about similar Russian efforts. Contains an extensive bibliography. —AVN

The work on machine translation in the Soviet Union. Fourth International Congress of Slavicists Reports, Sept., 1958.

183 V. Yu. Rosentsveig. Trans. by L. R. Mickelsen. MECH. TRANS. 5(3): 95-100 Dec. 1958.

A discussion of present Soviet efforts to achieve immediate and practical results in the field of MT. Dictionaries and rules have been compiled for translation from English, Chinese and Japanese into Russian. —AVN

USE OF INFORMATION

Information gathering patterns and creativity.

184 R. E. Maizell. Am. Document. 11(1):9-17 Jan. 1960.

A comparison of creative and "noncreative" research chemists with respect to the ways in which they use their professional and technical literature. —MEM

The information problem.

185 L. W. Ross. CHEM. ENG. 67(6):143-148 Mar. 21, 1960.

The importance of published information, specifically to engineers, and four alternative plans which an engineering department may follow to make it available. The work of the SLA Consultation Service is outlined. —AMC

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ANTIBIOTICS
V. 1, No. 1, Jan. 1959, monthly. $25.00. Consultants Bureau, New York 11.
Translation of Russian journal ANTIBIOTIKI.

CHEMOTHERAPIA
V. 1, No. 1, Jan. 1960, bimonthly, $13.50. S. Karger, New York.
An international review that will serve as a link between those interested in the problems of experimental and clinical progress in modern chemotherapy. Special attention will be given to clinical pharmacology and toxicology. From time to time a single issue will be devoted to one subject giving an all-around picture of various viewpoints on a current problem. Papers accepted in English, French or German.
the journal is the official organ of the International Symposium of Chemotherapy.

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V. 1, No. 1, Aug. 1959, monthly, $16.00. Coal Tar Research Association, Leeds, England.
Cover-to-cover translation of Russian journal KOKS-i KHIMIYA.
Important for engineers, chemists and technical staffs interested in coal carbonization for the production of metallurgical and gas coke, and in the recovery and refining of the by-products of coking. Of especial value is information on current advances in Russian coking technology.

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V. 1, No. 1, May 1960, monthly, $36.00 per year. Institute of Fuel, London, W. 1, London.
An expansion of FUEL ABSTRACTS.
Monthly summary of world literature on all scientific and technical aspects of fuel and power.

GENETICAL RESEARCH
V. 1, No. 1, Jan. 1960. Three times a year, $17.50 per volume. Cambridge University Press, New York.

GRUNDLAGEN UND ANWENDUNGEN DER INFORMATIONS THEORIE
V. 1, No. 1, Sept. 1959, monthly, $25.50 per volume. Springer Verlag, Berlin, W. Germany.

INSTRUMENT ABSTRACTS
V. 15, No. 1, Jan. 1960, monthly, $12.00 per volume. Taylor & Francis, Ltd., London, E. C. 4
A continuation of the former BULLETIN OF THE BRITISH SCIENTIFIC INSTRUMENT RESEARCH ASSOCIATION.
Devoted to abstracts of the world's technical literature relating to scientific and industrial instruments.

INSTRUMENT CONSTRUCTION
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This is a translation of the Russian monthly journal, PRIBOROSTROENIE.

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V. 1, No. 1, Jan. 1960, bimonthly, $10.00. American Institute of Physics, New York 17, N. Y.
Medium of publication of the more mathematical of physics papers and presentation of original and review articles on mathematical subjects of interest to physicists.

JOURNAL OF NEW DRUGS
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PERSPECTIVE
V. 1, No. 1, March 1960, quarterly, $7.50. Local Press Ltd., London W. 1
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Will report on economic achievements and trends that affect the production, promotion and marketing of the products of the photographic and allied industries.

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Will feature original work on the techniques and theory of information storage and retrieval with emphasis on scientific information and the intellectual problems involved. Papers will discuss new departures in classifying, indexing, recording and dissemination of information. Such disciplines as experimental psychology, semantics, logic, and reports on automatic data processing and mechanical translations are readily applicable to the above techniques.

SCOPE

Publication has been suspended with 21 November 1959 issue. Refunds on subscriptions can be received from Scope Ltd., Subscription Dept. 9, Grosvenor Street, London W. 1

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TECHNOLOGY AND CULTURE

Publisher changed from Case Institute of Technology, Cleveland, Ohio to Wayne State University Press, Detroit, Michigan.

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